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THE RELATIONSHIP BETWEEN CERTAIN ASPECTS OF LEADER
BEHAVIOR AND ORGANIZATIONAL CLIMATE

by

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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "The Relationship Between Certain Aspects of Leader Behavior and Organizational Climate" submitted by Werner George Schmidt in partial fulfilment of the requirements for the Degree of Master of Education.

ABSTRACT

The purpose of this study was to investigate relationships between leader behavior, as measured by the Leader-Behavior Description Questionnaire--Form XII (LBDQ), and organizational climate, as measured by the Organizational Climate Description Questionnaire (OCDQ). The problem was divided into five specific areas. These sought information about: the usefulness of the instruments in a school setting, the relationship between the subtests of the respective questionnaires, the intercorrelations among the subtests of the LBDQ, and the difference between leader behavior scores of principals grouped according to the climates of their schools.

The sample of this study consisted of forty-seven Alberta schools selected from a larger group of 171 schools which participated in a Council on School Administration climate project.

Schools were found to differ significantly on all of the twelve subtests of the LBDQ but on only six of the eight subtests of the OCDQ. It was also found that there were significant relationships among the LBDQ subtests. A relationship was observed between leader behavior and OCDQ subtests. Not surprisingly, therefore, leader behavior scores of principals were found to differ when grouped according to the school climates.

Several conclusions were drawn from the findings of this study. First, it would appear that both instruments are useful in identifying certain differences among schools. Secondly, the subtests of the LBDQ

are not independent. Thirdly, principals' leadership behavior was related to the school's organizational climate.

The last conclusion was probably the most important to this study. There was some evidence that the principal's behavior was significantly related to the organizational climate of the school. More specifically, the study revealed that principals who were more concerned about the comfort, well-being, and status of teachers tended to be in schools with Open rather than Autonomous school climates. Furthermore, principals who tended to become upset and anxious about postponements and uncertainties tended to be in schools with Controlled climates, whereas, principals who were more tolerant of postponements and uncertainties tended to be in schools with Open climates. Emphasis on productive output tended to be more highly associated with a Controlled climate than with an Open climate. Principals in Open climate schools reconciled conflicting demands, allowed subordinates to engage in leadership acts, and showed concern for the teachers' welfare to a greater extent than did principals in Familiar climate schools. Greater tolerance of uncertainty and postponement by the principal was found to be associated with an Autonomous climate than with a Controlled climate.

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CHAPTER I

INTRODUCTION

Formal organizations are established to facilitate the accomplishment of certain tasks. These tasks are achieved through the interaction of people, and this interaction must be directed toward goal attainment if the goals of the organization are to be realized. The integration of the complex relationships and interactions among the individuals to achieve the purposes of the organization is a function of the relationship between the leader and the followers in a formal organization.

In an effort to analyse one of the many variables that impinge upon this integration, students of administration have attempted to measure leader behavior of administrators. Among those studies that relate specifically to the measurement of leader behavior in educational organizations are those of Keeler (11), McBeath (12), and Greenfield (4). These studies show that Initiating Structure and Consideration are useful measures of leader behavior in the school setting. Recent studies by Stogdill and others (15) indicate that leader behavior can be measured on a number of dimensions in addition to Initiating Structure and Consideration. These studies have identified ten additional dimensions as measures of leader behavior in formal organizations. In part, this study will attempt to determine the usefulness of these additional dimensions in the school setting.

The other aspect of formal organizations upon which this study was focused is the relationship between leader behavior and group behavior. The achievement of the goals of the formal organization requires that leaders and followers interact. Both the characteristics of the leader and the characteristics of the group of followers would appear to influence the nature of this interaction. The essence of this interaction has been considered by persons such as Argyris (1) as the climate of an organization. Halpin and Croft (8) developed an instrument which purports to measure the organizational climate in a school. Among other problems, this study attempted to relate certain measures of leader behavior to certain measures of organizational climate.

I. THE PROBLEM

Statement of the Problem

The general purpose of this study was to explore the relationships between the descriptions of principals' behavior and the descriptions of the organizational climate of schools. More specifically, the problem was to determine what relationships existed between the principal's behavior, as measured by the Leader Behavior Description Questionnaire--Form XII, hereinafter referred to as the LBDQ, and the organizational climate of the school as measured by the Organizational Climate Description Questionnaire, hereinafter referred to as the OCDQ.

Specific Problems to be Investigated

The general problem, as stated earlier, was subdivided into five specific problems to facilitate the analysis of the data. The specific problems were:

1. Do schools differ in OCDQ descriptions?
2. Do schools differ in LBDQ descriptions?
3. Are the dimensions of the LBDQ mutually independent or do correlations exist among them?
4. Are each of the climate dimensions independent of each of the leader behavior dimensions?
5. Is the description of the organizational climate of a school, as measured by the OCDQ, related to the description of leader behavior, as measured by the LBDQ?

Importance of the Study

The measurement of leader behavior within formal organizations has been perceived, by students of administration, as necessary in order to determine what variables are operative in the achievement of organizational goals. The work of Hemphill and others (10) led to the reduction of a number of hypothesized dimensions of leader behavior to two strongly defined dimensions, namely, Initiation of Structure and Consideration.

Various authorities have found it reasonable to believe that two factors are not sufficient to account for all the observable variance in leader behavior. Stogdill (17) proposed a theory of group processes and

achievement which suggested that a number of variables operate in the differentiation of roles in social groups. The attempt to define, in operational terms, some of the variables of the leadership role resulted in the twelve dimensions of the LBDQ--representation, demand reconciliation, tolerance of uncertainty, persuasiveness, initiation of structure, tolerance of freedom, role assumption, consideration, production emphasis, predictive accuracy, integration, and superior orientation.

The LBDQ was found to be a useful measure of leader behavior in industry. Although the LBDQ has been used to describe leader behavior of school principals, this use has been limited. An attempt will be made in this study to indicate the usefulness of the instrument for measuring leader behavior in schools.

As teachers or school executives move among schools, they are inevitably struck by the difference in "atmosphere" of the schools. Halpin (8) has referred to this "atmosphere" as the organizational climate, and he states that the organizational climate may be construed as the "personality" of the school. This climate is thought to result from the interaction of group members among themselves and the interaction of the group with the leader. Attempts to define the variables that are operative in establishing the "personality" of a school resulted in the development of the OCDQ. This questionnaire is comprised of eight subtests; four of these pertain to the characteristics of the group and four to the characteristics of the principal as a leader.

It would seem that a description of the relationship between teachers and the principal within the formal organization, in operational terms, would be useful for the further development of theories in administration. The leader behavior, as measured by the LBDQ, and the organizational climate, as measured by the OCDQ, should provide us with useful data to help with the description of these relationships.

There might be some practical significance to the study as well. It would appear that if leader behavior and organizational climate can be measured, it would be possible to describe the relationship in a given school. Although many other matters would need to be considered, such data might help senior executives to make decisions about the desirability of perpetuating an existing climate. It might also form the basis on which, or the direction in which a principal and his staff might establish a program for change.

II. ASSUMPTIONS, DELIMITATIONS AND LIMITATIONS

Assumptions

A number of assumptions were made in this study. First, it was assumed that the respondents to the questionnaires understood the items well enough to respond accurately. It was further assumed that their responses were sincere. The third assumption was that both instruments used in this study presented data on an ordinal scale.

Delimitations

The study was limited to an analysis of the data received from the responses to the OCDQ and LBDQ in terms of the specific problems

listed earlier. The study was delimited further in that it included only schools from Alberta which chose to participate. The sample consisted of forty-seven schools that were selected from a larger group of one hundred seventy-one schools which participated in a Council of School Administration (CSA) climate project.¹

Limitations

This study had several limitations. The first of these was the method of choosing the sample for obtaining data. All the participants were members of the Council on School Administration, a specialist council of the Alberta Teachers' Association. Hence, it could be argued that since not all principals in Alberta were members of this council, this sample was not representative of the population of Alberta school principals.

A second limitation was that the LBDQ had not been used extensively to measure leader behavior in schools. Although Campbell and others (2, pp. 80-86) argue that educational administration is unique, it is readily admitted by them that many aspects of administration are common to all formal organizations. One of the common elements is the presence of leader behavior. The LBDQ was used to describe the leader behavior in several different organizations. Among the leaders studied were United States senators (16), ministers and community leaders (14),

¹The CSA climate project was undertaken jointly by the University of Alberta and the ATA Council on School Administration in 1964. It was the first use of the OCDQ in Alberta schools and was under the direction of Dr. J. H. M. Andrews.

corporation presidents (15), and others (2). In each case the LBDQ dimensions were found to be useful descriptions of leader behavior. It seemed reasonable, therefore, that the LBDQ would be an appropriate instrument for the present study.

A third limitation was that some respondents were the same for both instruments. This would suggest the possibility of a halo effect. An attempt to overcome this limitation was made in that the description of the leader, using the LBDQ, was not made until at least three months had elapsed since the completion of the OCDQ. A further precaution required the ten teachers, who were asked to complete the questionnaire to be chosen randomly in each school. Hence, in all schools where there were more than ten teachers, only a random number of respondents completed both questionnaires.

III. DEFINITIONS

Leader Behavior

For purposes of this study leader behavior was defined in terms of the twelve leader behavior subtests in the Leader Behavior Description Questionnaire: representation, demand reconciliation, tolerance of uncertainty, persuasiveness, initiation of structure, tolerance of freedom, role assumption, consideration, production emphasis, predictive accuracy, integration, and superior orientation.²

²The LBDQ and OCDQ subtests are described in Chapter III.

Organizational Climate

Within the framework of this study, organizational climate was considered to be one of the six categories of social interaction between the principal and teachers as measured by the eight subtests of the Organizational Climate Description Questionnaire: disengagement, hindrance, esprit, intimacy, aloofness, production emphasis, thrust, and consideration.

IV. ORGANIZATION OF THE THESIS

The next chapter deals with the literature related to the problem of this study. A description of the instruments used is also included. The procedures followed in selecting the sample and in collecting the data together with a description of the analysis of the data are found in Chapter III. The findings of the project are reported in the subsequent chapter. Chapter V deals with the interpretation, implications, conclusions, and recommendations of the study.

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CHAPTER II

CONCEPTUAL FRAMEWORK AND RELATED RESEARCH

I. LEADER BEHAVIOR

Various approaches to the study of leadership have been taken. Generally speaking, the approaches may be classified into two broad categories: (1) what leaders are like--including such things as personality traits, abilities, skills, and other personal attributes--and (2) what leaders do--the behavior engaged in by leaders. Though attempts to discover what leaders are like have not met with much success, these studies have helped to point out some of the basic problems involved in the study of leader behavior.

Some Definitions of Leadership

Leadership has been analyzed from many points of view. One of these views states that leaders "are persons who affect the behavior of others" (6, p. 162). Such a view emphasizes what a person does, not what he is, or what position he holds. It is readily apparent that in such a definition there is room for any group member to be a leader at certain times. In the school situation, a principal, though legally in the leadership position with its inherent status, authority and responsibility, would be the leader of his staff only when he engages in acts that influence the behavior of the group. If some other group member would perform such acts, the leadership would have reverted to that group member.

The definition of a leader as one who affects the behavior of others shifts the emphasis for the study of leadership from the leader as a person to the acts he performs. Leadership acts, however, do not exist independently of other factors. The nature of the group to be led and the situational factors which impinge upon it are important in the study of leader behavior. Presumably, these factors could help determine what sorts of leadership acts affect the behavior of the group. Many of the more recent studies of leader behavior were predicated on the assumption that leader behavior is a product of the interaction of many forces, some of the most powerful ones being outside the leader himself.

The studies referred to in the preceding paragraph include the Ohio Leadership Studies conducted by Shartle which indicate that there are two dimensions of leadership--"human relations" and "getting the work done" (40, p. 120). Halpin (19, 20) and Hemphill (22) refer to these dimensions as Consideration and Initiating Structure. These same dimensions were used in the studies of the leader behavior in schools conducted by Keeler (25), McBeath (29), and Greenfield (18).

The studies referred to above measured leader behavior through the administration of the 1957 version of the LBDQ. This instrument is based on the assumption that there are many forces acting upon the leader when he attempts to lead the group. However, regardless of the environmental factors and the characteristics of the group, two dimensions of leader behavior are thought to operate. There are those acts which organize the many variables of the situation in such a way that

the purpose of the organization can be achieved (Initiating Structure) while making provisions for the needs of the group and the individuals in it (Consideration).

The Getzels-Guba Model of the Social System

A theoretical framework of the leadership process which may help to conceptualize the rationale of the 1957 version of the LBDQ and also the LBDQ used in this study may be found in the Getzels and Guba (17) model of the social system. There seems to be some similarity between this model and the recognition, in the LBDQ, that measurement of leader behavior requires measurement of many interrelated variables. Pictorially, the model may be presented as in Figure 1.

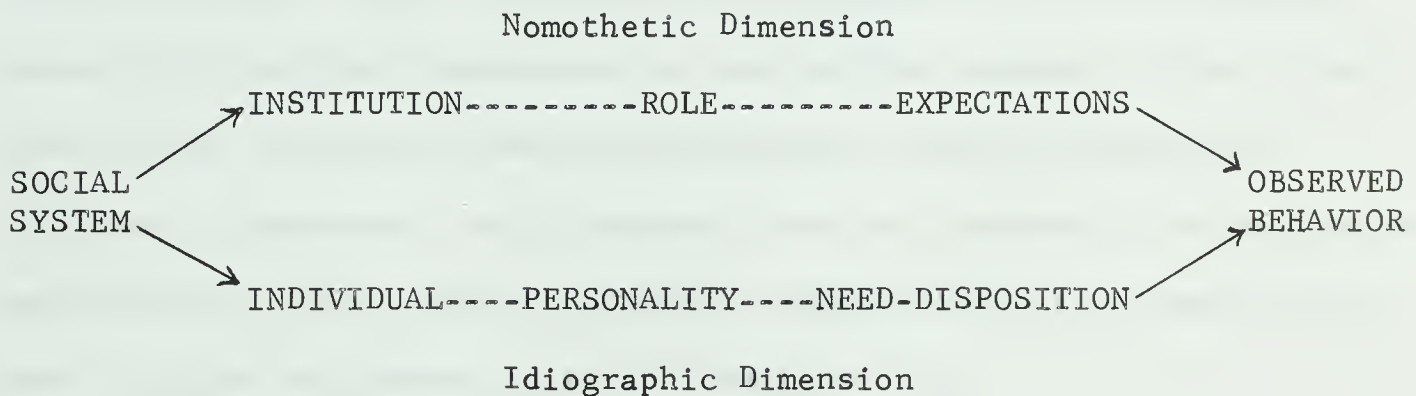


FIGURE 1

GETZELS-GUBA MODEL OF THE SOCIAL SYSTEM

Essentially, the model conceives of two dimensions of interpersonal relationships existing in formal organizations. These two dimensions-- nomothetic and idiographic--may be considered as independent for purposes of analysis; in practice, however, they are interrelated. The nomothetic

dimension is comprised of sociological aspects which include the institutions that prescribe certain roles and expectations to attain the goals of the system. The idiographic dimension contains the psychological aspects which involve the personality of the individuals and their respective need-dispositions.

The nomothetic dimension. The agencies established to perform certain imperative social functions tend to develop routinized patterns; these agencies are known as institutions. The institutions have within them certain positions, offices and statuses that specify roles and expectations for the incumbents. The various roles of the incumbents are interrelated and each role has meaning only in terms of its relation to other roles. Thus, the role of the principal cannot be discussed meaningfully without discussing the role of the teacher. Roles in turn are defined in terms of certain obligations, responsibilities and patterns of behaving. It is expected that the incumbent of a particular position will accept the obligations, responsibilities and patterns of behaving that are characteristic of that position.

The idiographic dimension. The idiographic dimension concerns itself with the personal aspects of the social system. Since no two individuals are exactly alike, one may conclude that each person will stamp the particular role which he occupies with his own unique pattern of behavior. The analysis of the personal dimension of the social system is conceived to comprise of the personality and the need-disposition of the individual. Personality has been defined by Getzels as "the

dynamic organization within the individual of those need-dispositions that govern his unique reactions to the environment" (16, p. 154). The need-dispositions are viewed as central in this definition of personality. Parsons and Shils define need-disposition as the "individual tendencies to orient and act with respect to objects in certain manners and to expect certain consequences from these actions" (35, p. 114). The need disposition is distinguished from the more general need "by its higher degree of organization and by its inclusion of motivational and evaluative elements which are not given by viscerogenic needs" (35, p. 10).

The interaction of dimensions. As mentioned earlier, the two dimensions may be considered independently but in fact they are interactive; Getzels points out that social behavior is the result of this interaction. Which of the dimensions will be of greater significance at a given time will depend largely upon the situation and the individuals in the system. If the school may be described as a social system, then the relationships between principal and teachers will be a function of the formal definition of the teachers' role and the expectations held for it as well as the personality and need-disposition of the teacher and principal. At times the satisfaction of the personal needs of the teacher would be more significant than the enforcement of expectations in terms of the school's goals because under certain conditions ultimate goal achievement would be impossible, until certain needs of the teachers had been met; at other times the emphasis would be reversed.

In the social context described above, there are instances when agreement between some teachers and the principal is easily attained. In other cases it is difficult to attain, and in still others it is never attained. This phenomenon has been dealt with by Getzels. He suggests that such conflicts arise from selective interpersonal perception; people see only what their own backgrounds permit them to see. Thus, two role incumbents may view the same role quite differently. Although the role may be clearly defined institutionally, after the institutional expectations have been filtered through the respective personalities and need-dispositions of the incumbents, there may be little congruence in the perception of the two individuals. As a result, a superordinate and a subordinate will not understand each other if the expectations of either regarding the other's role are incongruent. Thus, principals and teachers will understand each other only to the extent that the perceived role expectations of the principal and the teacher are congruent.

It should also be noted that the individuals in an organization tend to function as members of groups as well as individuals. These groups influence each of their members, other groups and the leader. Getzels and Guba recognized, in part, this aspect of the formal organization. Argyris (3), however, appears to have articulated this relationship somewhat more clearly in his discussion of the subsystems of an organization.

The Subsystems of an Organization

Although Argyris does not speak of a social system or of dimensions of the formal organization, he does speak of subsystems in the formal organization which are more or less analogous to elements of the Getzels-Guba model. Each of the subsystems gives rise to a unique pattern of behavior. There is the behavior that results from the formal organization's demands, the behavior that results from the informal activities of the group, and the behavior that results from an attempt, by various individuals, to fulfill their idiosyncratic needs. The interaction of all these different kinds of behavior results in the unique behavior pattern that tends to characterize the organization (3). As in the Getzels-Guba model, we find an emphasis on the interaction of individuals in an organizational structure that is designed to achieve a particular goal.

A Theory of Organizational Achievement

The concept of an organization as a social system with two general dimensions and the resultant behavior from the interaction of the behavior of various subsystems is not entirely foreign to Stogdill's theory of organization achievement. He says that "an organized group may be regarded as an input-output system in unstable balance" (41, p. 13). In effect this theory says that the group takes on something from outside itself that influences it. This influence on the group in turn causes the group to behave differently than if the influence were not felt. Stogdill suggests that for each organized group there are

input variables, output variables and mediating variables. In diagrammatic form, his theory appears as in Figure 2.

Member Inputs	Mediating Variables		Group Outputs
	Formal Structure	Role Structure	
Performances	Function	Responsibility	Productivity
Interactions	Status	Authority	Morale
Expectations	(Purpose, Norms)	(Operations)	Integration

FIGURE 2

STRUCTURE OF A THEORY OF ORGANIZATION
ACHIEVEMENT (41, P. 13)

Stogdill's own generalized statement of his theory says that the inputs of the group are the individual member's behaviors as evidenced in performances, interactions, and expectations. The performances and expectations are individualistic whereas interactions are between individuals in the group. The behavior inputs result in role differentiation and role performance; in group structure and operations. As the behaviors are mediated through the formal and role structures, achievement is effected. The output of the group, however, is not only accomplishing the group's goals but also morale and integration.

The model shows the predominant movement or progression as being from left to right, in Figure 2. That is, the input variables are affected by the various mediating variables and eventually result in certain outputs. It should be noted that there is also feedback as

well as horizontal interaction among the variables. The mediating variables are of two sorts: formal structure and role structure. These variables are thought to structure the member inputs and set the pattern for interaction among individuals. These concepts appear to be somewhat parallel to the Getzels-Guba concept of nomothetic and idiographic dimensions of the social system.

It should be emphasized that there is not necessarily a straight-line relationship among the variables in the model. Thus productivity is not necessarily the direct effect of performances that have been mediated through function and responsibility. It is probably the result of the interactions and expectations of member inputs which have been affected by the several mediating variables as well. Whereas Stogdill says that the organization has made gains if any one of the possible outputs results, the model actually seems to suggest that if leader behavior is effective there should be achievement of the organization's purpose, improvement of staff morale and greater integration or meshing of individual efforts into the work of the organization.

The LBDQ was developed from a consideration of this theory of organizational achievement. Whereas the 1957 version of the LBDQ measured leader behavior on only two dimensions: initiating structure and consideration, Form XII measures it on twelve dimensions. As was stated earlier, the initiation of structure might be roughly analogous to the nomothetic dimension of the social system and consideration to the idiographic dimensions. Any analogy of this type tends to oversimplify the relationships within the formal organization. Getzels and

Guba also realize that the generalized statement of their theory is an over-simplification of the way organizations operate. They express the necessity of considering the informal group which tends to operate parallel to the nomothetic and idiographic dimensions and, to use Stogdill's term, mediates both the personality of the individual and the perception of the institutional roles and expectations. Furthermore, the larger society outside the institution affects a particular institution's role expectations; the physical endowments of the individual affect his personality and need-disposition. Although these many factors are operative, the 1957 LBDQ measures but two dimensions. Stogdill and others did not think it reasonable to believe that these or any two factors are sufficient to account for all the variance in leader behavior. Stogdill's theory of role differentiation and group achievement which was described earlier suggested that a number of variables operate in the differentiation of roles in social groups. One of these roles is the leadership role.

The general problem of this study was to explore whether there are relationships between the principal's leader behavior and the organizational climate of the school. A measure of the principal's leader behavior was essential to the study. Although both the 1957 version and Form XII of the LBDQ were considered, the decision was made in favor of the latter for the same reasons that led Stogdill and others to seek a measure that would account for more of the variance in leader behavior. Both instruments have been used in a number of research projects; a brief review of this research follows.

Research Into Leader Behavior

The LBDQ (1957 version), developed in the Ohio Leadership Studies under the direction of Shartle (40) was used in a number of studies on leadership. Among these were studies of leader behavior which related initiating structure and consideration to: the effectiveness of aircraft commanders (20); the administrative reputation of college departments (22); the effectiveness of teaching as measured by pupil growth (18); the effectiveness ratings of school superintendents (19); staff morale and productivity of teachers (25); teacher effectiveness (29); and staff characteristics (33). All of the studies noted above found that there was a relationship between the leader behavior dimensions and the variable under study. From these studies it appears evident that the 1957 version of the LBDQ was a useful instrument for measuring leader behavior in a variety of situations.

The LBDQ used in this study has also been used in a number of investigations. The new scales were empirically tested by Day (8) in his study of basic leadership dimensions of supervisory behavior at various levels in the organizational hierarchy of an industrial organization. Further studies of leader behavior were conducted by Stogdill, Goode and Day involving ministers and community leaders (44), corporation presidents (45) and United States senators (46). The purpose of these studies was to discover whether leader behavior could be described in terms of the additional dimensions to those proposed earlier, namely, initiation of structure and consideration. Although these studies revealed that the dimensions were related to each other, they appeared

to be useful ways of describing leader behavior.

When Day (8) analysed his findings about supervisory personnel in an industrial organization, he discovered twelve factors, ten of which were considered to be independent measures of leader behavior. The names of these factors closely resembled the twelve dimensions of the LBDQ used in this study. Day entitled them role enactment, tolerance of uncertainty, consideration, tolerance of member freedom of action, motivation of group members, representation, low influence with superiors, postponement of decision-making, superior-oriented interaction, and unilateral demand reconciliation. The study of United States senators (46) used only nine of the present twelve dimensions. It excluded superior orientation, predictive accuracy and persuasiveness. The study of ministers and community leaders (44) included only ten of the present subscales. It did not include superior orientation and integration.

In each of the studies referred to above, the purpose of the research was to find a more complete description of leader behavior. It was from this series of studies that the LBDQ Form XII evolved. A description of the LBDQ seems useful at this point.

Description of the LBDQ

The LBDQ describes leader behavior in terms of twelve subtests: representation, demand reconciliation, tolerance of uncertainty, persuasiveness, initiation of structure, tolerance of freedom, role assumption, consideration, production emphasis, predictive accuracy, integration, and superior orientation. Each subtest is composed of either five or

ten items. The subtests represent a rather complex pattern of behaviors. Brief definitions and sample items used in each subtest follow.

Representation. The leader speaks and acts as the representative of the group. Items such as, "He acts as the spokesman of the group," are used to measure leader behavior on this dimension.

Demand reconciliation. The leader reconciles conflicting demands and reduces disorder to system. An example of a test item is, "He gets confused when too many demands are made of him."

Tolerance of uncertainty. The leader is able to tolerate uncertainty and postponement without anxiety or upset. A characteristic item is, "He is able to delay action until the proper time occurs."

Persuasiveness. The leader uses persuasion and argument effectively; he exhibits strong convictions. "He persuades others that his ideas are to their advantage," is a test item.

Initiation of structure. The leader clearly defines his own role and lets followers know what is expected. To test this behavior, an item such as, "He makes sure that his part in the group is understood by the group members," is used.

Tolerance of freedom. The leader allows followers scope for initiative, decision, and action. A typical item is, "He turns the members loose on a job, and lets them go to it."

Role assumption. The leader actively exercises the leadership role rather than surrendering leadership to others. Respondents indicate whether he is "easily recognized as the leader of the group."

Consideration. The leader regards the comfort, well-being, status, and contributions of followers. Subordinates are asked whether, "He looks out for the personal welfare of group members."

Production emphasis. The leader applies pressure for productive output. Items such as, "He asks the members to work harder," are used here.

Predictive accuracy. The leader exhibits foresight and ability to predict. The respondents score whether "things usually turn out as he predicts."

Integration. The leader maintains a closely knit organization and resolves inter-member conflicts. The measure for this test is taken by items such as, "He sees to it that the work of the group is coordinated."

Superior orientation. The leader maintains cordial relations with superiors, has influence with them, and is striving for higher status. A measure of the leader's rating on this dimension is determined by responses to items such as, "He keeps the group in good standing with higher authority."

The discussion of leader behavior has focused on one variable in

the milieu of complex interpersonal relationships that exist in formal organizations. In each of the theoretical considerations discussed, it became clear that leadership, whether idiographic, nomothetic or transactional in style, exists to influence the behavior of group members in such a way as to achieve the goals of the organization and at the same time maintain the group by providing for the satisfaction of the needs of the various group members. There are many forces both within and outside the organization which influence the nature of the relationship referred to above. The next section of this chapter will deal with certain aspects of the internal relationship.

III. ORGANIZATIONAL CLIMATE

The interaction of individuals within the formal organization has been described in a number of ways; one of the more recent involves the concept of organizational climate.

One of the first scholars to consider the relationships between group members and leaders was probably Cattell (7). He conceived of the group as having syntality, and he postulated the syntality of the group to be comprised of the attributes of the group as a group and synergy. The attributes of the group as a group is considered as the structure and population variables within the group. Synergy is the energy, that is, the skills, aptitudes, personality and other unique characteristics of each member in the group plus the extra energy ("intrinsic synergy") that results from the coordination of all the separate energies. Group synergy, in turn is of two kinds: "effective

synergy" which is directed toward accomplishment of group goals and "maintenance synergy" which is directed toward maintaining the group.

Argyris used the concept of climate to describe a pattern of interaction among three systems of variables: formal organizational variables, personality variables, and informal organization variables (3). The interaction of these variables in a complex network tends to maintain itself in a steady state. This homeostatic state Argyris calls the organizational climate. This definition is much broader than the concept of organizational climate used by Halpin and Croft in the development of the OCDQ; however, the concept of a relatively stable interrelationship among persons in formal organizations is similar to the concept developed by Halpin and Croft. Brown used the term to denote the "peculiar patterning of cathexes in any given organization." He defines cathexis as "the degree of the affective significance that one object (thing, idea or person) bears to another" (5, p. 66). He concludes that "organizational climate refers to the cathectic patterns giving identity to subgroup and interpersonal relations in a living organization" (5, p. 66). Miklos (31) uses the construct of personality to help clarify by analogy the concept used by Halpin and Croft. To the extent that individuals are characterized by particular patterns of behavior which are relatively permanent, so too, organizations are different in that there are various permanent patterns of interrelationships between persons in organizations. This is similar to the homeostatic state described by Argyris as the climate of an organization.

Halpin and Croft further identified Social Needs, Esprit, and Social Control as the major components of the climate of a school. They related these three factors to Schutz's (39) concept of interpersonal needs--affection, inclusion, and control. Satisfying the need for control appears to be largely the principal's responsibility as he directs and coordinates the activities of the group toward accomplishing the organization's goals. The principal's behavior in directing and coordinating tends to make the group members feel that they are either included or excluded in the process. Thus teachers tend to feel excluded if they are never consulted about the directives coming from the principal and included if they are consulted. Furthermore, each individual needs to feel affection through the establishment of satisfactory relationships with other individuals in the group as well as with the principal.

The reference to the interaction of all the members of the school group as a measure or an indicator of the personality of the school receives some support from other scholars. It is this element that caused Barnard (4) to differentiate between effective and efficient groups. Others have refined the thinking on this point until there appears to be general agreement today that the leader, to be effective, must make it possible for members of the group to derive satisfaction from both task accomplishment and social interaction.

The significance of the social component of an organization receives support from a number of empirical studies of organizational behavior. Lawrence (26) found that an organization must help individuals to achieve the goals of the organization, maintain themselves as

a group and provide personal satisfaction. The Human Relations Program of the University of Michigan (26), the Institute of Human Relations at Yale University (26), and the Hawthorne experiments (38) all indicate that it was the development of an organized social group in a peculiar and effective relationship with its supervisors that resulted in better production regardless of environmental conditions.

Further support comes from Likert (27), Moyer (34), Hollander (24), Fiedler (12), and Morris (33). These scholars, each conducting empirical research in a different situation, concluded that: each person in an organization had to be a member of a well-knit and effectively functioning work group with high skills of interaction and high performance goals for maximum use of human potential in the organization (27, 34); the leader in an organization must be accepted by the group and judged competent by the group for the task at hand (24); the leader, though part of the group, must maintain a psychological distance from the members of the group (12); there is a clear relationship between the perceptions of the group members of the leader's behavior and the group's perception of itself.

As mentioned earlier, Halpin and Croft have defined the characteristic interpersonal relationships as the organizational climate of an organization. Their attempt to measure it resulted in the construction of the OCDQ; a brief description of the instrument follows.

Description of the OCDQ

The measurement of organizational climate requires an operational definition; this Halpin and Croft have tried to achieve in the development

of the OCDQ. They refer to the "social component" of organizational climate only; the "social component" is the "social relationship between the principal and the teachers" (21, p. 7). However, as Andrews points out, the "social component" as defined by Halpin and Croft, does not deal adequately with the social relationship since it excludes the social interaction of groups and individuals in the school other than principals or teachers (2).

Although Halpin and Croft agree that such factors as socio-economic status of pupils; the personality of the principal, teachers, and pupils; the aptitudes, interests, abilities, and attitudes of pupils; the parents' attitudes to the school; the school plant; and the school-board teacher relationships should be considered when analyzing the organizational climate, none of these factors are measured directly by the OCDQ.

The questionnaire attempts to measure the climate of the school in terms of eight dimensions. There are four subtests which describe the group characteristics--Disengagement, Hindrance, Esprit, Intimacy--and four subtests that describe the leader's behavior--Aloofness, Production Emphasis, Thrust, Consideration.

Definitions of the OCDQ subtests and samples of the items used in the questionnaire to measure the respective dimensions are presented below.

Disengagement indicates the extent to which the teachers are really behaving as a group--the extent to which they work well together or gripe and bicker among themselves. Typical items are: (a) Teachers interrupt other faculty members who are talking at staff meetings;

(b) Teachers exert pressure on nonconforming faculty members.

Hindrance refers to the teachers' feelings that the principal burdens them with routine duties rather than facilitates their work. Typical items are: (a) Routine duties interfere with the job of teaching; (b) Administrative paper work is burdensome at this school.

Esprit indicates the extent to which teachers feel that their social needs and satisfactions from goal accomplishment are being met. Typical items are: (a) The morale of the teachers is high; (b) Teachers at this school show much school spirit.

Intimacy refers to the teachers' enjoyment of friendly social relations with each other. Typical items are: (a) Teachers invite other faculty members to visit them at home; (b) Teachers work together preparing administrative reports.

Aloofness refers to behavior of the principal which is characterized as formal and impersonal. Typical items are: (a) The rules set by the principal are never questioned; (b) Faculty meetings are organized according to a tight agenda.

Production Emphasis refers to behavior of the principal which is characterized by close supervision of the staff. Typical items are: (a) The principal schedules the work for the teachers; (b) The principal ensures that teachers work to their full capacity.

Thrust is the attempt by the principal to motivate the teachers through the example which he personally sets. Typical items are: (a) The principal goes out of his way to help teachers; (b) The principal sets an example by working hard himself.

Consideration refers to the principal's treatment of teachers with warmth; the extent to which he does something extra for them. Typical items are: (a) The principal helps teachers solve personal problems; (b) The principal stays after school to help teachers finish their work.

From the scores obtained on these subtests, a categorization of the organizational climate of the school is obtained. Halpin and Croft used factor analytic methods to develop six different prototypes of organizational climates; each of these prototypes had a specified set of subtest scores. The profiles of these prototypical climates were ranked on a continuum of scores roughly paralleling the Esprit subtest scores which became increasingly smaller from Open to Closed climates. In addition to Esprit, the authors identified authenticity, satisfaction, and leadership initiation as useful factors in distinguishing among the six kinds of climates. A description of the climate profiles follows.

Open climate. The open climate describes an energetic, lively organization which is moving toward its goals, but which is also providing satisfaction for the individual's social needs. Leadership acts emerge easily and appropriately as they are required. The group is not preoccupied exclusively with either task-achievement or social-needs satisfaction; satisfaction in both areas seems to be obtained easily and almost effortlessly.

Autonomous climate. In the autonomous climate leadership acts emerge primarily from the group. The leader exerts little control over the group members; high Esprit results from social-needs satisfaction.

Satisfaction from task achievement is also present, but to a lesser degree.

Controlled climate. This climate is impersonal and highly task-oriented. The group's behavior is directed primarily toward task accomplishment, while relatively little attention is given to behavior oriented to social-needs satisfaction. This climate lacks "openness" or "authenticity" of behavior, because the group is disproportionately preoccupied with task achievement.

Familiar climate. The familiar climate is highly personal but uncontrolled. Members satisfy their social needs, but pay relatively little attention to social control in respect to task accomplishment. Accordingly, Esprit is not extremely high simply because the group members secure little satisfaction from task achievement.

Paternal climate. In the paternal climate the principal constrains the emergence of leadership acts from the group and attempts to initiate most of these acts himself. The leadership skills within the group are not used to supplement the principal's own ability to initiate leadership acts. Accordingly, some leadership acts are not even attempted. In short, little satisfaction is obtained from task accomplishment or social-needs satisfaction; hence Esprit among the members is low.

Closed climate. In this climate there is a high degree of apathy on the part of all members of the organization. The organization is not "moving"; Esprit is low because the group members secure neither

social-needs satisfaction nor the satisfaction that comes from task achievement. The members' behavior can be described as "inauthentic"; indeed, the organization seems to be stagnant.

Research Related to Organizational Climate

A number of studies have been carried out seeking to clarify the relationship between climate scores and such variables as the characteristics of schools, principals, and teachers; the satisfaction of teachers; the perceived effectiveness of principals and the achievement; attitudes and morale of pupils.

Feldvebel (11) found no relationship between the organizational climate of the school and the socio-economic status of the community. The academic achievement of pupils seemed to be unrelated to organizational climate as well. However, a relationship was found to exist between three subtests of the OCDQ and the two variables mentioned. Hindrance and Consideration were related to the socio-economic status of the community; Production Emphasis and Consideration were related to pupil achievement.

Andrews (2) concluded from a number of studies designed to produce evidence as to the construct validity of the OCDQ, that the overall climate categorizations were little more than descriptions of commonly occurring patterns of principal-staff interaction and that they tend to predict nothing that is not predicted better by the subtests. He did find some significant relationships between the subtests and other variables. Teacher satisfaction was strongly related to Esprit as was

teachers' rating of the school's effectiveness, Intimacy was closely related to achievement, and teachers' rating of school effectiveness was negatively related to Disengagement. The rated effectiveness of the principal related significantly to all subtests except Aloofness.

A study of the relationship of organizational climate of a school to the personality of the principal was conducted by Plaxton (36). No overall relationship between the personality of the principal and the climate of the school was discovered; however, a number of relationships were observed between personality preferences and those subtests concerned with the behavior of the principal.

Ewasiuk (10) found that several dimensions of the principals' role perception were unrelated to school climate. Weak, negative relationships were found between emphasis on status and Esprit, and between emphasis on particularism and Disengagement.

A study to determine the relationship between OCDQ subtests and student morale, attitudes, attendance, and drop-out rates was conducted by Pyra (37). The study involved grade ten students in forty-seven Alberta schools. Pyra found that student-rated school effectiveness was related to Production Emphasis and Thrust; Production Emphasis was also related to student-rated teacher effectiveness and teacher likability. Student-rated principal effectiveness was related to Thrust, Aloofness, and Esprit.

Lupini concluded that when two individuals or groups hold common values, each is likely to perceive the behavior of the other as desirable, even though the behavior may not be generally acceptable (28). The

conclusion was based on the findings that congruence in values of principals and teachers were related to Aloofness and Production Emphasis. The same study also showed that the values held by staff members in a school were related to the organizational climate categorization.

A study of the relationship between personal variables of school principals and the organizational climate by Anderson (1) revealed that principals of schools with Open climates were more confident, secure, self-confident, cheerful, resourceful, and self-sufficient than principals of schools with more Closed climates. Differences were also found between principals' perceptions of the climate of the school and staffs' perceptions. Principals perceived (1) the Disengagement and Hindrance of the staffs to be lower and (2) Esprit and Intimacy to be higher than did the staff members. Staff members perceived the Consideration and Production Emphasis of the principal to be lower than did the principals.

III. SUMMARY

In this chapter an attempt was made to relate leader behavior and organizational climate to a conceptual framework. Leader behavior was viewed with reference to the concept of an organization as a social system that gives rise to nomothetic, idiographic or transactional styles of leader behavior. Further development of this concept was considered in terms of Argyris' concept of subsystems in an organization and Stogdill's organizational achievement theory in terms of inputs and outputs.

The conceptualization of the organization as involving the interaction of many variables, and especially the interaction of leaders and groups, formed the basis for discussion of organizational climate. The theoretical considerations underlying the measurement of leader behavior and the empirical studies of leader-group relations concluded with an operational definition of organizational climate and an instrument designed for its measurement.

The review of the studies presented in this chapter would tend to suggest that the problem of this study, to analyze the relationships between leader behavior and organizational climate, can be investigated through the use of the LBDQ and the OCDQ.

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CHAPTER III

RESEARCH PROCEDURES

This chapter deals with the collection of the data used in this study, the scoring of the instruments, and the statistical tests used in the analysis of the data. The chapter also includes the null hypotheses that were developed to test the sub-problems posed earlier in this study.

I. DATA COLLECTION

The Sample

The sample for this study was taken from the first climate project undertaken by the Council on School Administration in which 171 schools participated. The climate project obtained descriptions of the climate of each of the participating schools. From the climate project sample, henceforth called the CSA sample, a smaller sample, henceforth called the LBDQ sample, of sixty schools was chosen for the purpose of this study. The sample was chosen as follows: the schools in the CSA sample were grouped into six categories according to climate, namely, schools whose climate was Open, Autonomous, Controlled, Familiar, Paternal, or Closed, respectively. After the stratification was completed, the schools in each stratum were numbered consecutively. A table of random numbers was consulted to select a random sample of ten schools from each group.

Characteristics of the Sample

Tables I to IV, inclusive, summarize some of the characteristics of the sample. Examination of Table I reveals that forty-seven out of sixty, or 78.3 per cent of the schools selected completed the LBDQ.

Table II compares the percentages of schools of a particular size which were included in the CSA and LBDQ samples. A study of Table II reveals that most of the schools in the LBDQ, as well as the CSA sample, had between ten and twenty-four teachers on their staff. The largest group of schools had between ten and fourteen teachers on staff.

A further description of the schools is found in Table III. This table shows that the largest class of schools for both samples was the elementary school (grades 1 to 6); the next largest class was the combined elementary-junior-senior high school (grades 1 to 12); with the third largest class made up of elementary-junior high schools (grades 1 to 9). These three classes of schools made up 73.3 per cent and 65.7 per cent of the LBDQ and CSA samples, respectively.

Table IV reveals that teachers and principals differed on several characteristics in each sample. As might be expected, teachers, generally, had less teaching experience than principals; had taught fewer years in the present school than the principal; were younger than the principal and had less formal teacher education than the principal. Whereas the above observation holds for both samples, it should be noted that the teachers in the LBDQ sample had more teaching experience; had been in the present school longer; were younger and had a little less

TABLE I

NUMBER OF SCHOOLS THAT COMPLETED LEADER BEHAVIOR QUESTIONNAIRE
BY TYPE OF CLIMATE

	C l i m a t e						
	Open	Autonomous	Controlled	Familiar	Paternal	Closed	Total
Number of schools that received the questionnaire	10	10	10	10	10	10	60
Number of schools that completed the questionnaire	7	8	8	9	8	7	47

TABLE II
COMPARATIVE PERCENTAGES OF SCHOOLS BY NUMBER OF TEACHERS
ON STAFF FOR LBDQ AND CSA SAMPLES

Number of teachers on staff	Percentage of schools	
	LBDQ (N=47)	CSA (N=171)
4 or fewer	0	0.6
5 - 9	6.4	8.4
10 - 14	31.9	33.7
15 - 19	19.1	16.9
20 - 24	25.5	18.1
25 - 29	8.5	10.2
30 - 39	4.3	5.4
40 - 49	0	1.8
50 or more	4.3	4.8

TABLE III
COMPARATIVE PERCENTAGES OF SCHOOLS BY GRADES TAUGHT
FOR LBDQ AND CSA SAMPLES

Grades taught	Percentage of schools	
	LBDQ (N=47)	CSA (N=171)
1 - 6	33.3	28.3
1 - 8	8.9	4.8
1 - 9	17.8	15.1
1 - 11	0	1.2
1 - 12	22.2	22.3
7 - 9	2.2	7.8
7 - 12	6.7	8.4
9 - 12	6.7	3.6
10 - 12	2.2	8.4

TABLE IV

CHARACTERISTICS OF TEACHERS AND PRINCIPALS IN
LBDQ SAMPLE AND CSA SAMPLE

	Median number of years of teaching experience	Median length of time in present school	Median Age	Median number of years of teacher education	N
Teachers (LBDQ)	11.4	6.1	34.9	2.1	375 ^a
(CSA)	9.4	2.2	39.4	2.2	1355 ^b
Principals (LBDQ)	16.1	6.3	46.3	4.6	44 ^c
(CSA)	18.8	5.5	49.3	5.4	144 ^d

^aFourteen teachers did not respond to these items.

^bFifty teachers did not respond to these items.

^cThree principals did not respond to these items.

^dData for twenty-seven principals were incomplete.

training than the teachers in the CSA sample. The principals of the CSA sample on the other hand, tended to have had more experience; were older; had more formal training; but were in the present school for a shorter period of time than the principals in the LBDQ sample.

Collection of OCDQ Data

Each of the principals who participated in the CSA project was sent ten copies of the OCDQ; one questionnaire was completed by the principal and nine were completed by individual staff members. The teachers who responded to the questionnaire were chosen randomly in all schools which had more than nine teachers in addition to the principal. A coordinator in each school administered the questionnaire. After completing the questionnaire, each teacher enclosed it in an envelope, sealed it, and handed the envelope to the coordinator who returned all the questionnaires.

Collection of LBDQ Data

Each of the principals included in the LBDQ sample received ten copies of the LBDQ. Upon receiving the questionnaire, the principals were asked to appoint a coordinator who gave the questionnaire to ten teachers on his staff. The staff members were selected in the same manner as that followed in the collection of OCDQ data. After completing the questionnaire the teachers enclosed their questionnaire in the envelope provided, sealed it, and handed it to the coordinator who returned all the questionnaires.

It should be noted that the completion of the LBDQ took place three months after completion of the OCDQ. This time lapse probably helped to overcome the problem of a "halo" effect which might have resulted from the fact that some teachers in the schools may have responded to both instruments. A review of the characteristics of the two samples reveals that there probably was not a marked overlap of respondents. The median age, length of time in present school, and years of teaching experience (see Table IV) was somewhat different for the two samples which suggests that a number of the respondents were different for each questionnaire.

II. TREATMENT OF THE DATA

Scoring of the Instruments

Both the OCDQ and LBDQ require the respondents to indicate the frequency with which a given behavior is perceived to occur. For example, in the OCDQ the respondent checks whether "The mannerisms of teachers at this school are annoying," occurs very frequently, frequently, sometimes, or rarely. The items in the LBDQ are responded to in precisely the same manner with one addition; the respondent may describe a particular behavior as occurring "never." Each of the responses is given a numerical value and the school score determined. The school score on each subtest for either instrument is the mean of all respondents' scores for that school. Table V shows the means for the LBDQ sample in this study as well as certain other groups' description of their leader. It will be noted that the differences in measured leader

TABLE V

COMPARATIVE LBDQ MEANS OF ALBERTA SAMPLES AND SELECTED GROUPS

LBDQ Subtests	LBDQ-OGDQ Study	Alberta Principals (CSA)	Corporation Presidents	Labor Presidents	College Presidents	Community Leaders
Representation	39.0	39.6	41.0	44.4	42.8	39.2
Demand Reconciliation	38.8	39.9	41.2	43.0	---	39.4
Tolerance of Uncertainty	36.8	36.9	35.9	40.4	37.2	37.7
Persuasion	35.8	37.0	40.1	43.1	41.1	39.5
Initiation of Structure	37.9	38.3	38.5	38.3	37.7	37.2
Tolerance of Freedom	38.6	41.2	38.9	38.0	39.6	36.4
Role Assumption	38.6	40.1	42.7	43.3	43.5	39.8
Consideration	38.7	39.6	41.5	42.3	41.3	41.1
Production Emphasis	31.2	33.5	38.9	36.0	36.2	35.4
Predictive Accuracy	36.0	36.8	40.1	41.7	---	39.5
Integration	36.0	36.0	---	---	---	---
Superior Orientation	37.0	37.8	43.2	---	42.9	---

behavior, even though in different organizations, did not vary greatly between organizations.

There are some exceptions, however. It will be observed that corporation presidents, labor presidents, and college presidents scored higher, on an average, than did principals and community leaders on Persuasion, Role Assumption, Consideration, Production Emphasis, Predictive Accuracy, and Superior Orientation.

III. ANALYSIS OF THE DATA

The data obtained from the scoring of the OCDQ and LBDQ questionnaires were treated statistically in order to study each of the sub-problems presented earlier. Nonparametric statistics were used since the LBDQ scores were considered to be on the ordinal scale rather than the interval scale. Each of the sub-problems, stated earlier, is restated here as a null hypothesis for purposes of statistical analysis.

Sub-Problems Restated as Null Hypotheses

- Ho. 1 There will be no significant difference between schools when their respective scores on the OCDQ subtests are compared.
- Ho. 2 There will be no significant difference between principals when their respective LBDQ subtest scores are compared.
- Ho. 3 The correlation between pairs of LBDQ subtests will not differ significantly from $\rho=0$.
- Ho. 4 The correlation between LBDQ and OCDQ subtests will not differ significantly from $\rho=0$.

Ho. 5 There will be no significant difference between principals of schools with different climates when their respective scores on LBDQ subtests are compared.

Kruskal—Wallis One-Way Analysis of Variance by Ranks

The Kruskal—Wallis one-way analysis of variance by ranks is a useful test for deciding whether independent samples are from different populations (1, p. 184). This statistical test was used to test the first null hypothesis: there will be no significant difference between schools when their respective scores on the OCDQ subtests are compared. It was also used to test the second null hypothesis: there will be no significant difference between principals when their respective LBDQ subtest scores are compared.

The application of these tests was the same for each null hypothesis. The only difference was that for the first hypothesis OCDQ measurements were used; for the second hypothesis LBDQ measurements were used. The test required that the respondents' scores for each subtest be ranked across all respondents in order to determine whether scores differed between schools.

Spearman's Rank Correlation Coefficient

The Spearman's coefficient of correlation by ranks is a measure of the relationship between two sets of scores at an ordinal level of measurement. This coefficient was used to test null hypotheses three and four. The calculation of the coefficient requires that the scores for each LBDQ subtest or OCDQ subtest be rank ordered across all schools.

Kolmogorov-Smirnov Two-Sample Test

The Kolmogorov-Smirnov test determines whether two independent samples have been drawn from the same population (or from populations with the same distribution) (1, p. 127). This test was used for null hypothesis five: there will be no significant difference between principals of schools with different climates when their respective scores on LBDQ dimensions are compared. For the application of this test the schools were grouped according to their organizational climates and the test was applied to determine whether the differences in LBDQ subtest scores between principals of schools with different climates were significant.

IV. SUMMARY

The research procedures involved in the collection, treatment, and analysis of data were discussed in this chapter. A sample of forty-seven schools, stratified according to organizational climate, was used in this study. The data were treated statistically by the use of three nonparametric tests: Kruskal-Wallis one-way analysis of variance; the Spearman's rank correlation coefficient; and the Kolmogorov-Smirnov two-sample test. These procedures were used to test the five null hypotheses derived from the five sub-problems of this study.

REFERENCES FOR CHAPTER III

1. Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1956.

CHAPTER IV

RESULTS OF ANALYSIS

The previous chapter dealt with research procedures; this chapter presents the results of the analysis of the data. It includes a description of the application of the tests used for each sub-problem. The findings for each sub-problem are discussed immediately following the presentation of the results of the analysis for the respective sub-problems.

I. OCDQ DIFFERENCES BETWEEN SCHOOLS

Null Hypothesis One

The first sub-problem was to determine whether schools differed in terms of OCDQ descriptions. The null hypothesis developed for this problem was: there will be no difference between schools when their respective scores on the OCDQ subtests are compared.

Statistical Test

The Kruskal—Wallis one-way analysis of variance for "k" independent samples was appropriate since each of the forty-seven schools was an independent sample. The test is designed to determine whether independent samples are drawn from different populations. In this case the purpose of the test was to determine whether the OCDQ subtests would reveal differences among schools which were presumed to have different characteristics and hence were from different populations. For each

OCDQ subtest the responses of individual teachers were rank-ordered across the forty-seven schools to determine whether the ranks were significantly different among schools. Table VI shows the subtests of the OCDQ that differentiated among schools.

Discussion

An examination of Table VI reveals that the first null hypothesis was rejected for six of the eight subtests. The purpose of this test was to obtain evidence about the ability of the OCDQ subtests to differentiate among schools. The assumption underlying the test was that schools differed in terms of the characteristics described by the eight subtests of the OCDQ. If schools were different, these differences should be revealed in the scores obtained on the respective subtests of the OCDQ. If no significant differences were found it would have been concluded that either the schools were not from different populations; that is, they did not vary on these characteristics, or the OCDQ was not powerful enough to measure these differences; that is, these subtests did not discriminate between schools on these characteristics. Since it was deemed likely that schools differed on these characteristics, a failure to show a difference among schools was taken as evidence that the subtests did not discriminate among schools.

An examination of Table VI reveals that the Intimacy and Consideration subtests did not differentiate among schools. For the reasons given above, the conclusion of this finding was that the two subtests were probably not powerful enough to detect differences among schools on these characteristics.

TABLE VI
RESULTS OF THE KRUSKAL -WALLIS TEST OF DIFFERENCES
AMONG SCHOOLS ON OCDQ SUBTESTS

OCDQ Subtest	Ho. 1 Rejected	Level of Significance
Disengagement	Yes	.05
Hindrance	Yes	.001
Esprit	Yes	.001
Intimacy	No	---
Aloofness	Yes	.001
Production Emphasis	Yes	.001
Thrust	Yes	.001
Consideration	No	---

Further study of Table VI, however, reveals that six of the subtests did differentiate among schools. Thus it would appear that the staffs of the schools of this sample differed in the degree to which they worked well together in a task (Disengagement). Similarly, staffs seemed to differ in the degree to which they felt that their work was being hampered by routine duties and committee requirements assigned by the principal (Hindrance) and the degree to which they felt that their social needs were being satisfied (Esprit). Some principals, on the other hand, were perceived as more formal and impersonal while others were less formal and impersonal (Aloofness). Principals also differed in the closeness with which they supervised their teachers (Production Emphasis), and the extent to which they motivated their teachers by setting a good example (Thrust).

II. LBDQ DIFFERENCES BETWEEN SCHOOLS

Null Hypothesis Two

The second sub-problem was to determine whether schools differed in terms of LBDQ descriptions. The null hypothesis derived from this sub-problem was that there will be no significant difference between principals when their respective LBDQ scores are compared.

Statistical Test

Since the forty-seven schools were independent samples, the Kruskal -Wallis one-way analysis of variance for "k" independent samples was appropriate to determine whether the LBDQ subtests were able to

measure differences among schools in terms of the characteristics of each subtest. The process of analysis for this sub-problem was the same as that used for the test of the first null hypothesis. Table VII shows the LBDQ subtests that differentiated among schools.

Discussion

The second null hypothesis was rejected for each of the subtests of the LBDQ. An examination of Table VII reveals that the schools differed on each of the subtests; this difference was significant at the .001 level of confidence for most of the subtests.

The purpose of this test was to ascertain whether the leader behavior subtests included in the LBDQ were powerful enough to differentiate among principals. It was assumed that the principals in the various schools differed in leader behavior, and it was further assumed that the staffs in the various schools would perceive these differences and reflect them in their responses to the questionnaire. As indicated by the findings, each of the LBDQ subtests differentiated among principals. It was concluded, therefore, that the LBDQ subtests were powerful enough to measure differences in principals' behavior. On this account, then, it appears that the leader behavior of principals may be described meaningfully in terms of the characteristics proposed by the various LBDQ subtests.

TABLE VII
RESULTS OF THE KRUSKAL -WALLIS TEST OF DIFFERENCES
AMONG SCHOOLS ON LBDQ SUBTESTS

LBDQ Subtest	Ho. 2 Rejected	Level of Significance
Representation	Yes	.01
Reconciliation	Yes	.001
Tolerance of Uncertainty	Yes	.001
Persuasiveness	Yes	.001
Initiation of Structure	Yes	.001
Tolerance of Freedom	Yes	.001
Role Assumption	Yes	.001
Consideration	Yes	.001
Production Emphasis	Yes	.001
Predictive Accuracy	Yes	.01
Integration	Yes	.001
Superior Orientation	Yes	.001

III. RELATIONSHIPS BETWEEN LBDQ SUBTESTS

Null Hypothesis Three

The third sub-problem of this study was concerned with the independence of the LBDQ subtests. The null hypothesis designed to test the independence of the subtests stated that the correlation between pairs of LBDQ subtests will not differ significantly from $\rho=0$.

Statistical Test

The Spearman rank correlation coefficient, ρ , was used to determine the degree of relationship between pairs of LBDQ subtests. The test required that the rank order of each LBDQ subtest be established across the forty-seven schools. The computation of ρ revealed a significant correlation between the order of ranks for pairs of subtests.

Table VIII shows the correlations obtained in the analysis. The pairs of subtests for which the null hypothesis was rejected are underlined.

Discussion

The third sub-problem was designed to obtain evidence about the mutual independence of the LBDQ subtests. Table VIII contains a total of fifty-two significant correlation coefficients. The discussion of these relationships will be limited to those correlations that might be considered high (.70 or above). The most striking of these inter-correlations was the clustering of Demand Reconciliation, Role Assumption,

TABLE VIII
RANK CORRELATION COEFFICIENTS BETWEEN PAIRS OF LBDQ SUBTESTS
(N=47)

	Rep	DR	TU	Per	IS	TF	RA	Con	PE	PA	Int	SO
Representation	1.00	.17	-.17	<u>.43^a</u>	<u>.43</u>	-.03	<u>.27</u>	<u>.29</u>	<u>.43</u>	<u>.34</u>	<u>.38</u>	<u>.43</u>
Demand Reconciliation		1.00	<u>.49</u>	<u>.55</u>	<u>.37</u>	<u>.44</u>	<u>.77</u>	<u>.69</u>	<u>.18</u>	<u>.80</u>	<u>.79</u>	<u>.55</u>
Tolerance of Uncertainty			1.00	.04	-.21	<u>.71</u>	.18	<u>.43</u>	-.49	<u>.25</u>	<u>.25</u>	<u>.25</u>
Persuasiveness				1.00	<u>.69</u>	-.02	<u>.77</u>	<u>.42</u>	<u>.57</u>	<u>.73</u>	<u>.69</u>	<u>.65</u>
Initiation of Structure					1.00	-.17	<u>.68</u>	<u>.27</u>	<u>.74</u>	<u>.62</u>	<u>.60</u>	<u>.45</u>
Tolerance of Freedom						1.00	-.02	<u>.48</u>	-.41	.21	.22	.14
Role Assumption							1.00	<u>.50</u>	<u>.56</u>	<u>.74</u>	<u>.77</u>	<u>.71</u>
Consideration								1.00	.03	<u>.59</u>	<u>.77</u>	<u>.51</u>
Production Emphasis									1.00	<u>.41</u>	<u>.44</u>	<u>.44</u>
Predictive Accuracy										1.00	<u>.82</u>	<u>.42</u>
Integration											1.00	<u>.63</u>
Superior Orientation												1.00

^aThe significant correlations are underlined.

Predictive Accuracy and Integration. Each of these subtests was highly related to every other subtest within the group. It might appear, at first glance, that these variables tended to measure the same aspects of leader behavior. Further study of the correlations, however, revealed that Role Assumption, Predictive Accuracy, and Integration were also related to other LBDQ subtests. These subtests were highly correlated with Superior Orientation, Persuasiveness, and Consideration, respectively. It should be remembered that the analysis of the second sub-problem of this study revealed that each of the LBDQ subtests differentiated between principals of different schools. Hence, it would appear that these correlation coefficients indicated a relationship between certain aspects of leader behavior.

There were a number of other high intercorrelations. Tolerance of Uncertainty and Production Emphasis were highly correlated with Tolerance of Freedom and Initiation of Structure, respectively. These correlations might be explained in terms of consistency of behavior. One would expect that the principal who allows his followers scope for initiative, decision, and action (high Tolerance of Freedom) would be able to tolerate dubiousness and delay without anxiety or upset (high Tolerance of Uncertainty). Similarly, the principal who strives for high output (high Production Emphasis) might tend to clarify what was expected of each of his followers (high Initiation of Structure).

The correlations found in this study are similar to those found by Brown (1) with two exceptions; he found that Tolerance of Freedom was related to Consideration, Predictive Accuracy, Integration, and Superior

Orientation to a greater extent than the relationship found in this study, and that Tolerance of Freedom was not related to Production Emphasis.

The analysis of the correlations between the LBDQ subtests would lead one to conclude that there were many relationships between certain aspects of leader behavior as measured by the LBDQ subtests. A further conclusion might be that the scores on the subtests themselves were not mutually exclusive; that is, the various subtests may not have described those elements of leader behavior that were independent of each other.

IV. RELATIONSHIPS BETWEEN LBDQ AND OCDQ SUBTESTS

Null Hypothesis Four

An attempt to analyse the nature of the relationship between leader behavior and group behavior was done in terms of sub-problem four. Specifically, sub-problem four was designed to obtain evidence whether OCDQ and LBDQ subtests were related. The null hypothesis derived from this problem was that the correlation between LBDQ and OCDQ subtests will not differ significantly from $\rho=0$.

Statistical Test

The Spearman rank correlation coefficient was used in the analysis of data to study the relationship between LBDQ and OCDQ subtests. The test required that the ranks for LBDQ and OCDQ subtests, respectively, be established across the forty-seven schools. The application of the test would reveal whether significant correlations between the order of

the ranks of pairs of LBDQ-OCDQ subtests existed for the sample.

Table IX shows the correlation coefficients that were obtained; those coefficients of correlation, for which the null hypothesis was rejected, are underlined.

Five of the eight OCDQ subtests were found to be related to one or more of the leader-behavior subtests and eleven of the LBDQ subtests were related to one or more OCDQ subtests. Examination of Table IX reveals that there were a total of twenty-six significantly related pairs.

The discussion of these relationships will be divided into two sections. First, the relationships between LBDQ leader behavior and OCDQ teacher behavior, and second, the relationships between LBDQ leader behavior and OCDQ leader behavior.

Discussion: LBDQ Subtests and OCDQ Teacher Behavior Subtests

Table IX reveals that seven of the LBDQ subtests were related to one or more OCDQ teacher behavior subtests. A further study of Table IX reveals that none of the LBDQ subtests were found to be related to Intimacy, an OCDQ subtest designed to measure a characteristic of teacher behavior in the school. It will also be observed that the analysis of the first sub-problem revealed that Intimacy was one of the OCDQ subtests that did not appear to differentiate among schools. The discussion of the significant correlations will be presented for the individual OCDQ subtests and the respective LBDQ subtests with which they were related.

TABLE IX

RANK ORDER CORRELATION COEFFICIENTS BETWEEN PAIRS OF LBDQ AND OCDQ SUBTESTS
(N=47)

LBDQ Subtests	OCDQ Subtests							
	Disen- gagement	Hin- drance	Esprit	Inti- macy	Aloof- ness	Production Emphasis	Thrust	Consid- eration
Representation	.18	-.01	-.05	-.12	.08	<u>.45^a</u>	.19	-.03
Demand Reconciliation	<u>-.45</u>	-.21	.00	.13	-.11	.25	<u>.53</u>	.13
Tolerance of Uncertainty	<u>-.45</u>	<u>-.34</u>	.34	.05	-.09	<u>-.41</u>	.14	.08
Persuasiveness	-.24	-.06	.20	.00	.12	<u>.39</u>	<u>.41</u>	.13
Initiation of Structure	-.07	.14	.20	.06	.15	<u>.60</u>	<u>.38</u>	.19
Tolerance of Freedom	<u>-.33</u>	-.20	<u>-.40</u>	-.01	<u>-.27</u>	-.22	.10	.10
Role Assumption	-.23	-.12	<u>.28</u>	.16	.04	<u>.43</u>	<u>.53</u>	.24
Consideration	-.13	-.21	<u>.28</u>	.03	.14	.05	<u>.44</u>	.03
Production Emphasis	.19	.25	-.11	.11	.14	<u>.73</u>	.10	.17
Predictive Accuracy	-.15	.03	<u>.44</u>	.07	-.13	<u>.41</u>	<u>.57</u>	.12
Integration	-.19	-.04	<u>.37</u>	.13	-.08	<u>.34</u>	<u>.56</u>	.18
Superior Orientation	-.23	-.26	.04	-.13	.08	<u>.11</u>	.19	.10

^aThe significant correlations are underlined.

LBDQ subtests and Disengagement. Each of the three significant correlations in this group was negative; hence, it appears that teachers who were not personally involved with the task at hand and who were merely going through the motions of organizational activity (high Disengagement) tended to have principals who were unable to reconcile conflicting demands and coordinate the various aspects of the school (low Demand Reconciliation); who did not tolerate uncertainty and postpone without becoming anxious or upset (low Tolerance of Uncertainty); and who allowed their staff little scope for initiative, decision-making, and action (low Tolerance of Freedom).

LBDQ subtests and Hindrance. Tolerance of Uncertainty was the only LBDQ variable related to Hindrance; the correlation between these two subtests was negative. Teachers tended to feel that their work was being furthered by the principal (low Hindrance) in schools where the principal had a tendency not to worry about uncertainty or become upset and anxious about postponements (high Tolerance of Uncertainty).

LBDQ subtests and Esprit. The analysis of the data revealed that six LBDQ subtests were related to Esprit--Tolerance of Uncertainty, Tolerance of Freedom, Role Assumption, Consideration, Predictive Accuracy, and Integration. Table IX reveals that each of the correlations, with the exception of Tolerance of Freedom, was positive. It was also noted that the correlations between Esprit and Role Assumption and Consideration were lower than that of the other LBDQ subtests.

Using the definition of the subtests as a basis of interpretation, it appeared that the extent to which teachers felt that their social needs and satisfactions from goal accomplishments were being met (Esprit) was positively related to the leader's Tolerance of Uncertainty, Role Assumption, Predictive Accuracy, and Integration, but negatively related to Tolerance of Freedom.

Discussion: LBDQ Subtests and OCDQ Leader Behavior Subtests

A study of Table IX reveals that eleven of the LBDQ subtests were related to one or more of the OCDQ leader behavior subtests. It was noted that none of the LBDQ subtests were found to be related to the OCDQ subtest, Consideration, and that OCDQ Consideration was judged, in the analysis of the first sub-problem, as one of the OCDQ subtests that was probably not powerful enough to measure differences between schools in terms of these characteristics. Findings will be discussed for each of the individual OCDQ subtests and the respective LBDQ subtests.

LBDQ subtests and Aloofness. There was only one significant relationship involving Aloofness, and this was a negative correlation with Tolerance of Freedom. The definition of the respective subtest seemed to lend credence to the finding; that is, a principal who is formal and impersonal (high Aloofness) would probably not permit his staff to make many decisions or take the initiative themselves (low Tolerance of Freedom).

LBDQ subtests and Production Emphasis. The strongest relationship in this area was between LBDQ Production Emphasis and OCDQ

Production Emphasis. Since both subtests seemed to measure behavior that emphasized productive output, the finding was considered to be a logical one. The correlation of Initiation of Structure with OCDQ Production Emphasis also seemed to be logically consistent when the definitions of the respective subtests were considered. Similarly, Role Assumption and Representation were found to be related to Production Emphasis. Persuasiveness, the ability to use argument effectively and with strong conviction and the ability to predict the outcome of a particular action (Predictive Accuracy) also seemed to be related to Production Emphasis. It also appears logical that high Integration--the ability to resolve conflicts between members of the organization--would probably tend to be related to emphasis upon output.

The lone negative correlation was also an expected finding. One would not expect the leader who exerted pressure for productive output to be tolerant of delays and ambiguity in future events (high Tolerance of Uncertainty).

LBDQ subtests and Thrust. The correlation between Persuasiveness and Thrust appeared to be logical as well since the ability to set a good example (high Thrust) might be expected to be associated with the ability to persuade people. Since concern about goal accomplishment is also part of high Thrust, it seemed to be internally consistent, therefore, to find that the leader's clear definition of what was expected of each member in the organization (high Initiation of Structure) was related to Thrust. The relationship between Thrust and Consideration also seemed to be logically consistent since the ability to influence by example

(high Thrust) would seem to involve regard for the comfort, well-being, and status of followers (high Consideration).

LBDQ subtests and Consideration. Both instruments have a common subtest labeled "Consideration." If the variable were descriptive of the same leader behavior, one would expect a highly significant correlation between the two variables; however, no significant correlation between LBDQ Consideration and OCDQ Consideration was found. Analysis of the definitions of the subtests revealed that LBDQ Consideration was largely concerned with non-authoritarian leader behavior, whereas OCDQ Consideration dealt mainly with personal assistance to teachers by the principal. Such a broad range of leader behavior is probably too great to be encompassed by a single concept. Hence the lack of correlation does not appear to be entirely unreasonable. Thus it would appear prudent to determine which "Consideration" is being used in any particular study of leader behavior.

V. LEADER BEHAVIOR SCORES AND ORGANIZATIONAL CLIMATE

Null Hypothesis Five

Sub-problem five was designed to obtain evidence about the differences between principals' leader behavior scores by organizational climate. The null hypothesis derived from this sub-problem stated that there will be no significant difference between LBDQ subtest scores of principals in schools with different climates.

Statistical Test

The Kolmogorov-Smirnov two-sample, two-tailed test was used. For the application of this test all the schools were grouped according to climate, and the resulting samples were considered independent for purposes of analysis. The Kolmogorov-Smirnov test determined whether the differences in LBDQ subtest scores between two independent samples were significant. The application of this test revealed the significant differences between pairs of school climates in terms of the respective LBDQ subtests.

Discussion

The purpose of problem five was to determine the relationship, if any, between organizational climate and leader behavior. The principals' scores on each LBDQ subtest were compared for each pair of climates. The application of the test revealed that there were only four pairs of climates that showed significant differences on some LBDQ subtest. Table X shows that the pairs of climates were: Open and Autonomous, Open and Controlled, Open and Familiar, Autonomous and Controlled. The discussion of the differences will be presented for significant pairs.

Open and Autonomous. The analysis of the data revealed that principals in schools with Open climates scored significantly higher on LBDQ Consideration than did principals of schools with Autonomous climates. According to Halpin (2, p. 33), the Open climate is characteristic of an organization in which goals are probably achieved, leadership acts emerge easily and appropriately, and the satisfactions of the individual's needs

TABLE X

SIGNIFICANT DIFFERENCES IN PRINCIPALS' LBDQ SCORES BETWEEN PAIRS
OF ORGANIZATIONAL CLIMATES

Climates Compared	LBDQ Subtests											
	Rep	DR	TU	Per	IS	TF	RA	Con	PE	PA	Int	SO
Open-Autonomous	No	No	No	No	No	No	No	<u>Yes</u>	No	No	No	No
Open-Controlled	No	No	<u>Yes</u>	No	No	No	No	No	<u>Yes</u>	No	No	No
Open-Familiar	No	<u>Yes</u>	<u>Yes</u>	No	No	No	No	<u>Yes</u>	No	No	No	No
Open-Paternal	No	No	No	No	No	No	No	No	No	No	No	No
Open-Closed	No	No	No	No	No	No	No	No	No	No	No	No
Autonomous-Controlled	No	No	<u>Yes</u>	No	No	No	No	No	No	No	No	No
Autonomous-Familiar	No	No	No	No	No	No	No	No	No	No	No	No
Autonomous-Paternal	No	No	No	No	No	No	No	No	No	No	No	No
Autonomous-Closed	No	No	No	No	No	No	No	No	No	No	No	No
Controlled-Familiar	No	No	No	No	No	No	No	No	No	No	No	No
Controlled-Paternal	No	No	No	No	No	No	No	No	No	No	No	No
Controlled-Closed	No	No	No	No	No	No	No	No	No	No	No	No
Familiar-Paternal	No	No	No	No	No	No	No	No	No	No	No	No
Familiar-Closed	No	No	No	No	No	No	No	No	No	No	No	No
Paternal-Closed	No	No	No	No	No	No	No	No	No	No	No	No

are derived from social interaction and job accomplishment. A high score on Consideration, according to Stogdill (3, p. 34), is descriptive of a principal who is concerned about the comfort, well-being, status, and contribution of his teachers. It appeared possible, therefore, that teachers would tend to find satisfaction from social interaction with other staff members as well as from task accomplishment if the principal is concerned about the status, comfort and well-being of his staff.

On the other hand, the Autonomous climate, according to Halpin, is one in which the leadership acts emerge primarily from the group. The leader exerts little control and needs satisfaction is mainly derived from group-member interaction and not task accomplishment. In such a school it may be that the principal had little concern for the comfort and well-being of the group; these needs would probably be met within the group. Thus, the low leader behavior score tends to be consistent with the climate characteristics.

Open and Controlled. Principals of schools with Open climates scored significantly higher on Tolerance of Uncertainty, but significantly lower on Production Emphasis, than did principals of schools with Controlled climates. The definition of Tolerance of Uncertainty indicates that the principal who scored high on this subtest was able to tolerate uncertainty and postponement without anxiety or upset. A high score on this subtest, therefore, seemed to be consistent with the general description of the Open climate. The finding of low Production Emphasis, however, seemed to be inconsistent with the definition of the

Open climate as one in which organizational goals are presumably achieved. In spite of the seeming inconsistency, the possibility may exist that goals are achieved without emphasis on production in the Open climate.

The Controlled climate, on the other hand, is descriptive of an organization in which the relationships are impersonal and task-oriented. There is little concern for satisfying the social needs of the group members. Since the emphasis in this climate appears to be on the task at hand, it seems reasonable that the principals should score high on Production Emphasis in the schools with a Controlled climate. Similarly, teachers in a school with a Controlled climate might perceive the principal as low on Tolerance of Uncertainty.

Open and Familiar. It was found that principals of schools with Open climates scored significantly higher on Demand Reconciliation, Tolerance of Uncertainty, and Consideration than did principals of schools with Familiar climates. The fact that these three dimensions were found together may be partly explained by the high intercorrelation among these dimensions. It may be recalled that the Open climate supposedly provided for needs satisfaction of group members from social interaction and task accomplishment; the Familiar climate is assumed to be descriptive of an organization in which the climate is personal. The group members obtain much satisfaction from social interaction, but give little attention to task accomplishment.

The high score on Demand Reconciliation for principals in an Open climate school seems to be consistent with the definition of the Open

and Familiar climates. In the Open climate goal achievement and group maintenance were supposedly extant whereas in the Familiar climate only group maintenance through member interaction was said to be emphasized. Theoretically, the resolution of conflicting demands (high Demand Reconciliation) is necessary in the context of either climate, but perhaps more so in the Open than in the Familiar climate. A similar line of reasoning tends to indicate why Tolerance of Uncertainty (the ability to tolerate the uncertainties of future events) was higher in the Open than in the Familiar climates.

The finding that LBDQ Consideration scores were higher for principals in Open climates than in Familiar climates also seems to be consistent with the description of these climates. It would seem that the principal's provision for the well-being, comfort, status, and contributions (high Consideration) of followers would tend to be more evident in a climate where the satisfaction of group members' needs seemed to be directed toward both goal accomplishment and social interaction (Open climate) rather than in a climate where goal accomplishment was probably not important (Familiar climate).

Autonomous and Controlled. Principals of schools with Autonomous climates scored significantly higher on Tolerance of Uncertainty than did principals of schools with Controlled climates. By definition, the principal who was high on Tolerance of Uncertainty was able to accept uncertainty and postponement without anxiety or upset. The Autonomous climate, also by definition, characterized an organization in which the

principal allowed staff members to develop many of their own patterns of interaction. He set a good example by working himself but remained aloof from the group. On the other hand, the teachers seemed to be hard at work doing the task assigned them.

Furthermore, one of the outstanding differences between the Controlled and Autonomous climates appeared to be the extent to which the leader and the group work as a team. Whereas, in the Autonomous climate there seemed to be considerable opportunity for the principal and teachers to make decisions together, the Controlled climate seemed to provide little of this. In the latter, the principal tended to make the decisions; therefore, it appeared reasonable to find the principals of schools with an Autonomous climate scoring higher on Tolerance of Uncertainty than did the principals of schools with a Controlled climate.

VI. SUMMARY

This chapter dealt with the findings which resulted from the analysis of the various sub-problems. The findings indicated that all of the OCDQ subtests, except Consideration and Intimacy differentiated among schools. Each of the LBDQ subtests differentiated among schools. It was also found that there were a number of correlations between LBDQ subtests as well as between pairs of LBDQ and OCDQ subtests. Principals' LBDQ scores in schools with different climates were significantly different in only four pairs: Open and Autonomous, Open and Controlled, Open and Familiar, and Autonomous and Controlled.

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CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of the problem of the study, the findings resulting from the analysis of the data and the conclusions that were derived from this analysis. The chapter continues with a statement of some of the interpretations and implications of the conclusions and ends with a statement of recommendations.

I. SUMMARY

The Problem

The general purpose of this investigation was to study the relationships between the organizational climate of schools and leader behavior of principals. More specifically, the problem was to determine what relationships existed between the principal's behavior, as measured by the LBDQ, and the organizational climate of schools as measured by the OCDQ.

The study was divided into five specific problem areas:

1. Do schools differ in OCDQ descriptions?
2. Do schools differ in LBDQ descriptions?
3. Are the dimensions of the LBDQ mutually independent or do correlations exist among them?
4. Are each of the climate dimensions independent of each of the leader behavior dimensions?

5. Is the description of the organizational climate of a school, as measured by the OCDQ, related to the description of leader behavior, as measured by the LBDQ?

Procedure

The sample consisted of forty-seven schools that participated in the first CSA Climate project. In each of the schools selected, teachers completed ten copies of the LBDQ and OCDQ. These questionnaires were completed by the teachers, only, in the case of the LBDQ and by the principal and nine teacher in the case of the OCDQ.

Several different statistical tests were used to provide some possible answers to the problems posed in this study. The Kruskal-Wallis one-way analysis of variance was used to determine whether schools differed in OCDQ descriptions and principals differed in LBDQ descriptions. Spearman's rank order correlation coefficient was used to establish whether each of the LBDQ subtests were independent of each other and whether the LBDQ subtests were related to the OCDQ subtests. The Kolmogorov-Smirnov two-sample test was used to examine whether the descriptions of the organizational climate were related to leader behavior as measured by the LBDQ.

Findings

1. The schools differed significantly in the scores obtained on six OCDQ subtests. No statistically significant differences were found between scores obtained on Intimacy and Consideration.

2. Principals in this sample differed significantly in the scores obtained on each of the LBDQ subtests.

3. There were many correlated pairs of LBDQ subtests; of the sixty-six pairs possible, fifty-two were related.

4. Some of the OCDQ subtests were significantly related to some of the LBDQ subtests. There were twenty-six significantly related pairs of subtests.

5. Significant differences were found among principals' LBDQ scores when these were grouped according to the organizational climate and compared. When grouped in this way, differences were found on four LBDQ subtests; these differences appeared between four pairs of climates. Table XI summarizes these differences.

II. CONCLUSIONS

The findings suggest some conclusions that might be drawn from this study. Since the sample may not have been representative of the total teacher and principal population in Alberta, the conclusions should be treated with caution if applied outside the scope of this study.

The analysis of the data for the first sub-problem led to the conclusions that all the OCDQ subtests, except Intimacy and Consideration, discriminated among schools.

The analysis of the second sub-problem led to the conclusion that all of the LBDQ subtests differentiated among schools in terms of the characteristics defined by the various subtests.

TABLE XI
DIFFERENCES BETWEEN LBDQ SCORES WHEN GROUPED ACCORDING
TO ORGANIZATIONAL CLIMATE

LBDQ Subtests	Pairs of Climates			
	Open-Autonomous	Open-Controlled	Open-Familiar	Autonomous-Controlled
Demand Reconciliation			High Low	
Tolerance of Uncertainty		High Low	High Low	High Low
Consideration	High Low		High Low	
Production Emphasis		Low High		

The rather high correlation coefficients among most of the subtests of the LBDQ led to the conclusion that there seemed to be many relationships between certain aspects of leader behavior as measured by the LBDQ subtests. The pairing of the subtests of the LBDQ for analysis of the third sub-problem yielded the conclusion that the subtests of the LBDQ were probably not independent.

The subtests of the OCDQ and LBDQ were paired for the analysis of the fourth sub-problem. The analysis indicated that there were a number of significantly related pairs. From this finding, the conclusion was derived that there seemed to be a number of relationships between organizational climate, as measured by the OCDQ and leader behavior, as measured by the LBDQ.

Sub-problem five was concerned with differences of leader behavior in schools with different climates. The analysis of the data revealed that there were only a few pairs of school climates for which principals' leader behavior scores differed significantly. A number of possible conclusions presented themselves. One of these was that principals did not differ greatly between climates. Another was that the climates may not have indicated large differences between schools. That is, schools with an Open climate, for example, may not have been very different from schools with an Autonomous climate. A third possible conclusion was that measures of the differences in the organizational climates of schools were not significantly related to measures of leader behavior as reflected in LBDQ scores.

The second possible conclusion, presented above, was accepted as the most plausible. The first conclusion was rejected since the analysis of the first and second sub-problems showed that both LBDQ and OCDQ subtests, with the exception of Intimacy and Consideration of the OCDQ, were powerful enough to measure differences between schools. Hence, it seemed that principals differed in behavior and that these differences, at least in terms of the definitions of the various organizational climates, should have been even greater when principals were compared according to organizational climate. The third possible conclusion above was rejected because it did not seem to be internally consistent with the concept of "organizational climate" to conclude that the organizational climate of a school might be unrelated to the principal's leader behavior. Furthermore, the analysis of sub-problem four showed that a number of the OCDQ subtests were related to a number of LBDQ subtests. This process of elimination left possible conclusion two, above.

Apart from the elimination of alternatives, other reasons may be presented for the acceptance of the conclusion that the climates may not have indicated large differences between schools. One of these reasons may be found in the method of arriving at the climate which forces the division of a sample of schools into the six climate categories.

III. INTERPRETATIONS AND IMPLICATIONS

There are a number of implications that may be drawn from the findings of this study. These will be discussed in the order that the findings for each of the problems were presented.

Implications of the Findings that Schools Differed on OCDQ Subtests

The purpose of the first sub-problem was to obtain evidence about the ability of the OCDQ subtests to differentiate among schools. The assumption underlying the test was that schools differed in organizational climates. Since the climate of a school was described in terms of scores obtained on certain subtests, the schools, if they were different, should have revealed that difference in the scores obtained on the respective subtests of the OCDQ. If no difference had been found between schools it would have been concluded that the measures were invalid, that is, they did not differentiate among schools. The findings indicated that Intimacy and Consideration did not differentiate among schools. Since it is unlikely that the schools did not differ in these characteristics, these subtests were not considered powerful enough to distinguish between schools. The other subtests showed significant differences and, therefore, were considered discriminating enough to measure differences between schools.

Implications of the Findings that Schools Differed on LBDQ Subtests

The purpose of the second sub-problem was to ascertain similar evidence with respect to the subtests proposed by the LBDQ. It was assumed by this study that the principals in the several schools differed in their leader behavior. It was further assumed that the staffs under the respective principals would perceive these differences and reflect them in their responses to the questionnaire items. Thus, it was concluded that these differences would be reflected in different scores

on the LBDQ if the subtests were powerful enough to measure them. Each of the LBDQ subtests did differentiate between principals. It was concluded, therefore, that the LBDQ subtests were powerful enough to measure differences in principals' behavior.

Implications of the Findings of Correlations Among LBDQ Subtests

The third sub-problem was designed to test whether the respective subtests of the LBDQ were mutually independent; the findings showed that they were not. A total of fifty-two pairs of significant correlations were discovered.

One obvious implication was that the LBDQ did not appear to have separated the elements of leader behavior that were mutually independent or exclusive. Nevertheless, since each dimension differentiated among principals, there appeared to be some merit in describing leader behavior in terms of the twelve dimensions presented. Thus in spite of some limitations, the questionnaire appeared to be useful in describing principal leader behavior.

Implications of the Relationships Between OCDQ and LBDQ Subtests

The general purpose of this study was to see whether any relationships existed between leader behavior and organizational climate. Accordingly, the correlation was determined between each possible pair of OCDQ and LBDQ subtests. The findings indicated that twenty-six pairs were significantly related.

Several implications were drawn from the relationship described above. Schools differed in terms of most of the OCDQ subtests and all

of the LBDQ subtests. Since the characteristics of teacher behavior were related to some of the characteristics of leader behavior, it might be speculated that there is a direction in this relationship. Unfortunately, the design of this study did not permit a definite statement about this relationship. The data did not permit a conclusion as to whether the principal's behavior helped to determine certain group characteristics or vice versa. A careful study of the items, however, led to the speculation that there may have been a causal relationship. If there was a causal relationship it was probably an interrelationship. That is, some leader behavior of the principal allowed certain group characteristics to develop and some group characteristics influenced the principal's leader behavior. Furthermore, there appeared to be a possibility that the principal's leader behavior affected the group's characteristics to a greater degree than vice versa.

Each of the above implications needs to have further research to permit more definitive statements. Should they be found valid, they could provide guidelines for the appointment and promotion of people to leadership positions.

Implications of the Differences Between Leader Behavior Scores and Organizational Climate

The object of the fifth sub-problem was to determine whether teachers, in schools having different climates, would describe the behavior of their principals differently. The LBDQ subtests showed that only the Open and Autonomous, Open and Controlled, Open and Familiar, and Autonomous and Controlled climates were different in terms of some leader behavior.

The implication that might be drawn from the findings of this problem was that there were only four pairs of different climates in which the behavior of the principals was discernably different between climates. This suggested that in each of the other pairs of climates some element other than the principal's behavior may have been different between climates. Such a possibility led to the speculation that leader behavior may have been more significant in some climates than others.

A second implication is that the conceptualization of different climates may not necessarily be realized by the formula for designating schools having particular climates. Whereas the nature of the technique forces all schools, in a particular sample, into one of the six climate categories, it is possible that in a given sample not all climates are actually represented. At the moment there is little, if any, evidence to substantiate the above. Nevertheless, it would appear that since principals differed in their behavior among schools, more differences of principal's leader behavior should probably have been noted when these scores were compared according to the school climate. Further research seems to be necessary to test these possibilities.

IV. RECOMMENDATIONS FOR FURTHER STUDY

The first recommendation follows from the finding that the LBDQ appeared to be a useful measure of leader behavior. Since this study contained no criteria by which the principal's behavior might be evaluated, it is recommended that a study relating the principal's behavior to such variables as the productivity of the school and effectiveness ratings of the principal by superintendents and teachers be initiated.

A second recommendation is that if such a study is embarked upon that the subjects be contacted early in the school year to select an appropriate time for collecting data with as little disturbance as possible.

Thirdly, it is recommended that a study relating teacher retention and professional development of staff to the organizational climate of the school be carried out. Such a study should prove to be of value to practising administrators.

Fourth, it is recommended that a study relating the readiness to accept innovation to organizational climate be carried out. Such a study might be helpful for initiating and adopting changes in schools.

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APPENDIX

.

LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE—Form XII

Originated by staff members of
The Ohio State Leadership Studies
and revised by the
Bureau of Business Research

Purpose of the Questionnaire

On the following pages is a list of items that may be used to describe the behavior of your supervisor. Each item describes a specific kind of behavior, but does not ask you to judge whether the behavior is desirable or undesirable. Although some items may appear similar, they express differences that are important in the description of leadership. Each item should be considered as a separate description. This is not a test of ability or consistency in making answers. Its only purpose is to make it possible for you to describe, as accurately as you can, the behavior of your supervisor.

Note: The term, “*group*,” as employed in the following items, refers to a department, division, or other unit of organization that is supervised by the person being described.

The term “*members*,” refers to all the people in the unit of organization that is supervised by the person being described.

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College of Commerce and Administration
The Ohio State University
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DIRECTIONS:

- a. READ each item carefully.
- b. THINK about how frequently the leader engages in the behavior described by the item.
- c. DECIDE whether he (A) *always*, (B) *often*, (C) *occasionally*, (D) *seldom* or (E) *never* acts as described by the item.
- d. DRAW A CIRCLE around *one* of the five letters (A B C D E) following the item to show the answer you have selected.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

- e. MARK your answers as shown in the examples below.

Example: He often acts as described..... A **B** C D E

Example: He never acts as described..... A B C D **E**

Example: He occasionally acts as described..... A B **C** D E

- 1. He acts as the spokesman of the group..... A B C D E
- 2. He waits patiently for the results of a decision..... A B C D E
- 3. He makes pep talks to stimulate the group..... A B C D E
- 4. He lets group members know what is expected of them..... A B C D E
- 5. He allows the members complete freedom in their work..... A B C D E
- 6. He is hesitant about taking initiative in the group..... A B C D E
- 7. He is friendly and approachable..... A B C D E
- 8. He encourages overtime work..... A B C D E
- 9. He makes accurate decisions..... A B C D E
- 10. He gets along well with the people above him..... A B C D E
- 11. He publicizes the activities of the group..... A B C D E
- 12. He becomes anxious when he cannot find out what is coming next..... A B C D E

A = Always
 B = Often
 C = Occasionally
 D = Seldom
 E = Never

- | | | | | | |
|--|---|---|---|---|---|
| 13. His arguments are convincing..... | A | B | C | D | E |
| 14. He encourages the use of uniform procedures..... | A | B | C | D | E |
| 15. He permits the members to use their own judgment in solving problems. | A | B | C | D | E |
| 16. He fails to take necessary action..... | A | B | C | D | E |
| 17. He does little things to make it pleasant to be a member of the group... | A | B | C | D | E |
| 18. He stresses being ahead of competing groups..... | A | B | C | D | E |
| 19. He keeps the group working together as a team..... | A | B | C | D | E |
| 20. He keeps the group in good standing with higher authority..... | A | B | C | D | E |
| 21. He speaks as the representative of the group..... | A | B | C | D | E |
| 22. He accepts defeat in stride..... | A | B | C | D | E |
| 23. He argues persuasively for his point of view..... | A | B | C | D | E |
| 24. He tries out his ideas in the group..... | A | B | C | D | E |
| 25. He encourages initiative in the group members..... | A | B | C | D | E |
| 26. He lets other persons take away his leadership in the group..... | A | B | C | D | E |
| 27. He puts suggestions made by the group into operation..... | A | B | C | D | E |
| 28. He needles members for greater effort..... | A | B | C | D | E |
| 29. He seems able to predict what is coming next..... | A | B | C | D | E |
| 30. He is working hard for a promotion..... | A | B | C | D | E |
| 31. He speaks for the group when visitors are present..... | A | B | C | D | E |
| 32. He accepts delays without becoming upset..... | A | B | C | D | E |
| 33. He is a very persuasive talker..... | A | B | C | D | E |
| 34. He makes his attitudes clear to the group..... | A | B | C | D | E |
| 35. He lets the members do their work the way they think best..... | A | B | C | D | E |
| 36. He lets some members take advantage of him..... | A | B | C | D | E |

A = Always
 B = Often
 C = Occasionally
 D = Seldom
 E = Never

- | | | | | | |
|--|---|---|---|---|---|
| 37. He treats all group members as his equals..... | A | B | C | D | E |
| 38. He keeps the work moving at a rapid pace..... | A | B | C | D | E |
| 39. He settles conflicts when they occur in the group..... | A | B | C | D | E |
| 40. His superiors act favorably on most of his suggestions..... | A | B | C | D | E |
| 41. He represents the group at outside meetings..... | A | B | C | D | E |
| 42. He becomes anxious when waiting for new developments..... | A | B | C | D | E |
| 43. He is very skillful in an argument..... | A | B | C | D | E |
| 44. He decides what shall be done and how it shall be done..... | A | B | C | D | E |
| 45. He assigns a task, then lets the members handle it..... | A | B | C | D | E |
| 46. He is the leader of the group in name only..... | A | B | C | D | E |
| 47. He gives advance notice of changes..... | A | B | C | D | E |
| 48. He pushes for increased production..... | A | B | C | D | E |
| 49. Things usually turn out as he predicts..... | A | B | C | D | E |
| 50. He enjoys the privileges of his position..... | A | B | C | D | E |
| 51. He handles complex problems efficiently..... | A | B | C | D | E |
| 52. He is able to tolerate postponement and uncertainty..... | A | B | C | D | E |
| 53. He is not a very convincing talker..... | A | B | C | D | E |
| 54. He assigns group members to particular tasks..... | A | B | C | D | E |
| 55. He turns the members loose on a job, and lets them go to it..... | A | B | C | D | E |
| 56. He backs down when he ought to stand firm..... | A | B | C | D | E |
| 57. He keeps to himself..... | A | B | C | D | E |
| 58. He asks the members to work harder..... | A | B | C | D | E |
| 59. He is accurate in predicting the trend of events..... | A | B | C | D | E |
| 60. He gets his superiors to act for the welfare of the group members..... | A | B | C | D | E |

A = Always
 B = Often
 C = Occasionally
 D = Seldom
 E = Never

- | | | | | | |
|--|---|---|---|---|---|
| 61. He gets swamped by details..... | A | B | C | D | E |
| 62. He can wait just so long, then blows up..... | A | B | C | D | E |
| 63. He speaks from a strong inner conviction..... | A | B | C | D | E |
| 64. He makes sure that his part in the group is understood by the group
members | A | B | C | D | E |
| 65. He is reluctant to allow the members any freedom of action..... | A | B | C | D | E |
| 66. He lets some members have authority that he should keep..... | A | B | C | D | E |
| 67. He looks out for the personal welfare of group members..... | A | B | C | D | E |
| 68. He permits the members to take it easy in their work..... | A | B | C | D | E |
| 69. He sees to it that the work of the group is coordinated..... | A | B | C | D | E |
| 70. His word carries weight with his superiors..... | A | B | C | D | E |
| 71. He gets things all tangled up..... | A | B | C | D | E |
| 72. He remains calm when uncertain about coming events..... | A | B | C | D | E |
| 73. He is an inspiring talker..... | A | B | C | D | E |
| 74. He schedules the work to be done..... | A | B | C | D | E |
| 75. He allows the group a high degree of initiative..... | A | B | C | D | E |
| 76. He takes full charge when emergencies arise..... | A | B | C | D | E |
| 77. He is willing to make changes..... | A | B | C | D | E |
| 78. He drives hard when there is a job to be done..... | A | B | C | D | E |
| 79. He helps group members settle their differences..... | A | B | C | D | E |
| 80. He gets what he asks for from his superiors..... | A | B | C | D | E |
| 81. He can reduce a madhouse to system and order..... | A | B | C | D | E |
| 82. He is able to delay action until the proper time occurs..... | A | B | C | D | E |
| 83. He persuades others that his ideas are to their advantage..... | A | B | C | D | E |

A = Always
 B = Often
 C = Occasionally
 D = Seldom
 E = Never

84. He maintains definite standards of performance.....	A	B	C	D	E
85. He trusts the members to exercise good judgment.....	A	B	C	D	E
86. He overcomes attempts made to challenge his leadership.....	A	B	C	D	E
87. He refuses to explain his actions.....	A	B	C	D	E
88. He urges the group to beat its previous record.....	A	B	C	D	E
89. He anticipates problems and plans for them.....	A	B	C	D	E
90. He is working his way to the top.....	A	B	C	D	E
91. He gets confused when too many demands are made of him.....	A	B	C	D	E
92. He worries about the outcome of any new procedure.....	A	B	C	D	E
93. He can inspire enthusiasm for a project.....	A	B	C	D	E
94. He asks that group members follow standard rules and regulations.....	A	B	C	D	E
95. He permits the group to set its own pace.....	A	B	C	D	E
96. He is easily recognized as the leader of the group.....	A	B	C	D	E
97. He acts without consulting the group.....	A	B	C	D	E
98. He keeps the group working up to capacity.....	A	B	C	D	E
99. He maintains a closely knit group.....	A	B	C	D	E
100. He maintains cordial relations with superiors.....	A	B	C	D	E

ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

Developed by
ANDREW W. HALPIN
and
DON B. CROFT

Your name should not be placed on this questionnaire.

School: _____
(Write in the name of your school)

Post Office Address: _____

On the following pages is a list of items that are used to describe the organizational climate or the “personality” of your school. The items describe typical behaviors or conditions that occur within a school. Please indicate to what extent each of these descriptions characterizes *your school*. Please do *not* evaluate the items in terms of “good” or “bad” behavior but read each item carefully and respond in terms of how well the statement describes your school.

It is important that your answers be “independent,” so please do not discuss your answers with other teachers. Though there is no time limit, it will probably take you 15 to 20 minutes to complete.

Please be frank in your responses with the assurance that individual responses are strictly confidential.

DIRECTIONS:

- a. READ each item carefully.
- b. THINK about how well the statement describes your school.
- c. DECIDE whether the behavior or condition described in the item occurs rarely, sometimes, often, or very frequently in your school.
- d. DRAW A CIRCLE around *one* of the four letters following the item to show the answer you have selected.

A=Very frequently occurs

B=Often occurs

C=Sometimes occurs

D=Rarely occurs

Please respond to EVERY item.

- | | | | | |
|---|---|---|---|---|
| 1. Teachers' closest friends are other faculty members at this school. | A | B | C | D |
| 2. The mannerisms of teachers at this school are annoying. | A | B | C | D |
| 3. Teachers spend time after school with students who have individual problems. | A | B | C | D |
| 4. Instructions for the operation of teaching aids are available. | A | B | C | D |
| 5. Teachers invite other faculty members to visit them at home. | A | B | C | D |
| 6. There is a minority group of teachers who always oppose the majority. | A | B | C | D |
| 7. Extra books are available for classroom use. | A | B | C | D |
| 8. Sufficient time is given to prepare administrative reports. | A | B | C | D |
| 9. Teachers know the family background of other faculty members. | A | B | C | D |
| 10. Teachers exert group pressure on non-conforming faculty members. | A | B | C | D |
| 11. In faculty meetings, there is the feeling of "let's get things done." | A | B | C | D |
| 12. Administrative paper work is burdensome at this school. | A | B | C | D |
| 13. Teachers talk about their personal life to other faculty members. | A | B | C | D |
| 14. Teachers seek special favors from the principal. | A | B | C | D |
| 15. School supplies are readily available for use in classwork. | A | B | C | D |
| 16. Student progress reports require too much work. | A | B | C | D |
| 17. Teachers have fun socializing together during school time. | A | B | C | D |
| 18. Teachers interrupt other faculty members who are talking in staff meetings. | A | B | C | D |
| 19. Most of the teachers here accept the faults of their colleagues. | A | B | C | D |
| 20. Teachers have too many committee requirements. | A | B | C | D |
| 21. There is considerable laughter when teachers gather informally. | A | B | C | D |
| 22. Teachers ask nonsensical questions in faculty meetings. | A | B | C | D |
| 23. Custodial service is available when needed. | A | B | C | D |
| 24. Routine duties interfere with the job of teaching. | A | B | C | D |

25. Teachers prepare administrative reports by themselves.	A	B	C	D
26. Teachers ramble when they talk in faculty meetings.	A	B	C	D
27. Teachers at this school show much school spirit.	A	B	C	D
28. The principal goes out of his way to help teachers.	A	B	C	D
29. The principal helps teachers solve personal problems.	A	B	C	D
30. Teachers at this school stay by themselves.	A	B	C	D
31. The teachers accomplish their work with great vim, vigor, and pleasure.	A	B	C	D
32. The principal sets an example by working hard himself.	A	B	C	D
33. The principal does personal favors for teachers.	A	B	C	D
34. Teachers eat lunch by themselves in their own classrooms.	A	B	C	D
35. The morale of the teachers is high.	A	B	C	D
36. The principal uses constructive criticism.	A	B	C	D
37. The principal stays after school to help teachers finish their work.	A	B	C	D
38. Teachers socialize together in small select groups.	A	B	C	D
39. The principal makes all class-scheduling decisions.	A	B	C	D
40. Teachers are contacted by the principal each day.	A	B	C	D
41. The principal is well prepared when he speaks at school functions.	A	B	C	D
42. The principal helps staff members settle minor differences.	A	B	C	D
43. The principal schedules the work for the teachers.	A	B	C	D
44. Teachers leave the grounds during the school day.	A	B	C	D
45. Teachers help select which courses will be taught.	A	B	C	D
46. The principal corrects teachers' mistakes.	A	B	C	D
47. The principal talks a great deal.	A	B	C	D
48. The principal explains his reasons for criticism to teachers.	A	B	C	D
49. The principal tries to get better salaries for teachers.	A	B	C	D
50. Extra duty for teachers is posted conspicuously.	A	B	C	D
51. The rules set by the principal are never questioned.	A	B	C	D
52. The principal looks out for the personal welfare of teachers.	A	B	C	D
53. School secretarial service is available for teachers' use.	A	B	C	D
54. The principal runs the faculty meeting like a business conference.	A	B	C	D
55. The principal is in the building before teachers arrive.	A	B	C	D
56. Teachers work together preparing administrative reports.	A	B	C	D
57. Faculty meetings are organized according to a tight agenda.	A	B	C	D
58. Faculty mcetings are mainly principal-report meetings.	A	B	C	D
59. The principal tells teachers of new ideas he has run across.	A	B	C	D
60. Teachers talk about leaving the school system.	A	B	C	D
61. The principal checks the subject-matter ability of teachers.	A	B	C	D
62. The principal is easy to understand.	A	B	C	D
63. Teachers are informed of the results of a supervisor's visit.	A	B	C	D
64. The principal insures that teachers work to their full capacity.	A	B	C	D

SOME INFORMATION ABOUT YOU AND YOUR SCHOOL

65. Number of teachers in your school, including the principal (check one):
- _____ (1) 4 or fewer
 - _____ (2) 5 to 9
 - _____ (3) 10 to 14
 - _____ (4) 15 to 19
 - _____ (5) 20 to 24
 - _____ (6) 25 to 29
 - _____ (7) 30 to 39
 - _____ (8) 40 to 49
 - _____ (9) 50 or more
66. What grades does your school include? Check the one below which most closely describes your school.
- _____ (1) Gr. 1 to 6
 - _____ (2) Gr. 1 to 8
 - _____ (3) Gr. 1 to 9
 - _____ (4) Gr. 1 to 11
 - _____ (5) Gr. 1 to 12
 - _____ (6) Gr. 7 to 9
 - _____ (7) Gr. 7 to 12
 - _____ (8) Gr. 9 to 12
 - _____ (9) Gr. 10 to 12
67. How long have you been in your present school, including this year?
- _____ (1) 1 yr.
 - _____ (2) 2 yrs.
 - _____ (3) 3 or 4 yrs.
 - _____ (4) 5 or 6 yrs.
 - _____ (5) 7 to 8 yrs.
 - _____ (6) 9 or 10 yrs.
 - _____ (7) 11 to 15 yrs.
 - _____ (8) 16 to 20 yrs.
 - _____ (9) 21 yrs. or more
68. How many years of teaching experience do you have, including the present year?
- _____ (1) 1 yr.
 - _____ (2) 2 yrs.
 - _____ (3) 3 or 4 yrs.
 - _____ (4) 5 or 6 yrs.
 - _____ (5) 7 or 8 yrs.
 - _____ (6) 9 or 10 yrs.
 - _____ (7) 11 to 15 yrs.
 - _____ (8) 16 to 20 yrs.
 - _____ (9) 21 yrs. or more
69. Your sex:
- _____ (1) Male
 - _____ (2) Female
70. What is your age?
- _____ (1) under 24 yrs.
 - _____ (2) 25-29 yrs.
 - _____ (3) 30-34 yrs.
 - _____ (4) 35-39 yrs.
 - _____ (5) 40-44 yrs.
 - _____ (6) 45-49 yrs.
 - _____ (7) 50-54 yrs.
 - _____ (8) 55-59 yrs.
 - _____ (9) 60 yrs. and over
71. How many years of training are you credited with for salary purposes? (Please drop fractional years).
- _____ (1) 1 yr.
 - _____ (2) 2 yrs.
 - _____ (3) 3 yrs.
 - _____ (4) 4 yrs.
 - _____ (5) 5 yrs.
 - _____ (6) 6 yrs.
72. Compared with other schools known to you, how good a job do you judge your school does in educating the students who come to it? (check one)
- _____ (1) outstanding
 - _____ (2) very good
 - _____ (3) slightly above average
 - _____ (4) slightly below average
 - _____ (5) poor
 - _____ (6) very poor
73. If you are the principal please check here (1) _____ and omit the next two items.
74. How well satisfied are you with all aspects of your teaching situation in your present school? (check one)
- _____ (1) enthusiastic
 - _____ (2) satisfied
 - _____ (3) fairly well satisfied
 - _____ (4) somewhat dissatisfied
 - _____ (5) dissatisfied
 - _____ (6) very dissatisfied
75. How effective do you consider your principal to be in performing all the various functions which he should perform? (This item is for research purposes only and even averages of scores are strictly confidential).
- _____ (1) outstanding
 - _____ (2) very good
 - _____ (3) slightly above average
 - _____ (4) slightly below average
 - _____ (5) poor
 - _____ (6) very poor

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